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MASSACHUSETTS
HIGHWAY COMMISSION

YEAR ENDING NOVEMBER 30

1911

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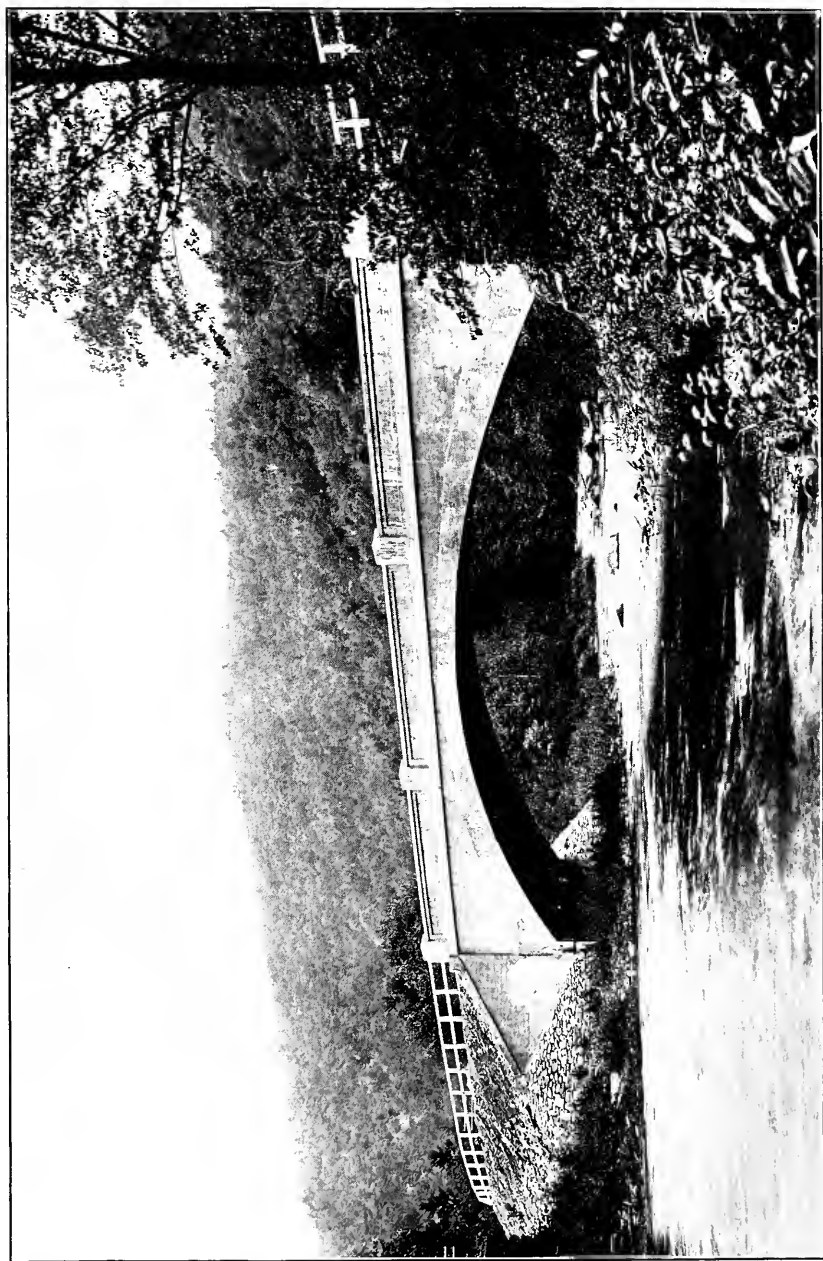
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NINETEENTH ANNUAL REPORT

OF THE

MASSACHUSETTS

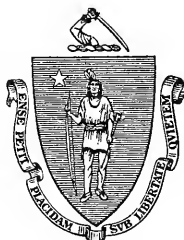
HIGHWAY COMMISSION,

FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1911.

PART I. — STATE HIGHWAYS AND MOTOR VEHICLES.

PART II. — SUPERVISION OF TELEPHONE AND TELEGRAPH
COMPANIES.

JANUARY, 1912.



BOSTON:

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APPROVED BY
THE STATE BOARD OF PUBLICATION.

The Commonwealth of Massachusetts.

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled.

The undersigned commissioners, appointed under the provisions of chapter 476 of the Acts of 1893 and of chapter 474 of the Acts of 1900, herewith submit, in Part I., their nineteenth annual report, in accordance with the provisions of chapter 47 of the Revised Laws, and, in Part II., their sixth annual report relative to their supervision of telegraph and telephone companies, under the provisions of chapter 433 of the Acts of 1906; both reports being for the fiscal year ending Nov. 30, 1911.

WM. D. SOHIER.
F. D. KEMP.

BOSTON, MASS., Jan. 2, 1912.

ANNUAL REPORT OF THE MASSACHUSETTS HIGHWAY COMMISSION.

PART I.

RELATING TO STATE HIGHWAYS AND MOTOR VEHICLES.

Mr. Harold Parker, of Lancaster, who was a member of the commission since 1900, and chairman since the spring of 1908, tendered his resignation to take effect on Nov. 1, 1911, having completed eleven years of faithful service to the Commonwealth.

The work of the commission during the past year was much the same as in the last few years. Less time was required for consideration of telephone rates, as fewer complaints were made, and, consequently fewer hearings were given. The number of investigations and hearings in automobile cases increased more than sufficiently to make up for this, however.

Many requests were made by the officials in charge of roads in various cities and towns for engineering advice, and these were complied with as far as possible, though many times there was no engineering force available for making the necessary surveys. When surveys were made by the towns, however, the commission rendered engineering assistance to the extent of preparing specifications and contracts for the work.

A great deal of the time of a number of the engineers was required to make surveys over Florida Mountain and in various other places where work was required to be done by special acts of the Legislature.

HEARINGS.

During the year 240 hearings were given on automobile complaints and accidents.

Public hearings were given on special regulations by municipal authorities affecting the use and operation of motor vehicles in the city of Boston and in the towns of Ashfield, Oak Bluffs and Marblehead.

During the year there were 2 public hearings given on formal telephone complaints, and 15 public hearings on matters relating to the location or relocation of street railway tracks on State highways.

In addition to the regular hearings held in each of the 14 counties, the commission gave hearings on petitions for State highways or for aid in the improvement of town ways in the following cities and towns:—

Abington.	Granby.	Northampton.
Adams.	Greenfield.	North Andover.
Amesbury.	Greenwich.	Northborough.
Amherst.	Groveland.	North Reading.
Ashburnham.	Hardwick.	Orange.
Athol.	Harwich.	Pembroke.
Barnstable.	Haverhill.	Phillipston.
Bedford.	Huntington.	Plainfield.
Bourne.	Lakeville.	Plymouth.
Boxford.	Lanesborough.	Prescott.
Bridgewater.	Lee.	Rehoboth.
Chelmsford.	Littleton.	Revere.
Chelsea.	Mansfield.	Richmond.
Chilmark.	Marblehead.	Rochester.
Cummington.	Marlborough.	Salisbury.
Dana.	Marshfield.	Sandwich.
Danvers.	Mashpee.	Savoy.
Deerfield.	Mattapoisett.	Seekonk.
Dennis.	Mendon.	Shrewsbury.
Dighton.	Merrimac.	Somerset.
Draeut.	Methuen.	Southborough.
Eastham.	Milford.	Southbridge.
Falmouth.	Millbury.	South Hadley.
Framingham.	Montague.	Sudbury.
Freetown.	New Marlborough.	Sutton.
Grafton.	North Adams.	Swansea.

Taunton.	Walpole.	Weston.
Templeton.	Wareham.	Williamsburg.
Topsfield.	Watertown.	Williamstown.
Townsend.	Wayland.	Winchendon.
Upton.	Webster.	Winchester.
Uxbridge.	West Brookfield.	Windsor.
Wakefield.	Westford.	Worthington.

Besides the formal hearings given at the office or elsewhere to the authorities or representatives of the 99 cities and towns mentioned, one or more members of the commission met the municipal authorities, or went over the roads in connection with work that was desired or requests made, in 185 of the other cities and towns in the Commonwealth.

STATE HIGHWAYS.

During the year ending Nov. 30, 1911, the commission completed work upon 40.37 miles of State highway, part of which was laid out last year and part this year. Construction was commenced also upon nearly 23 miles, but not completed. Forty-two miles of State highway were laid out during the year in 37 cities and towns. The total length of State highway at the end of the fiscal year was 879.60 miles.

The total expenditures by the commission for the construction of State highways since the work began, including the planting of trees, amounts to \$8,012,655.03.

There are now many petitions on file covering a total of about 2,000 miles of road.

CHARACTER OF CONSTRUCTION IN 1911.

Of the 40 $\frac{1}{3}$ miles of road completed this year, a little over 7 $\frac{3}{4}$ miles were water-bound macadam; 5 $\frac{1}{3}$ miles were of gravel; 4 $\frac{1}{2}$ miles were of sand, bound with oil; a little over 4 miles were of bituminous macadam, that is, macadam with bituminous binder incorporated in the top course by penetration method; 14 $\frac{1}{2}$ miles were of water-bound macadam with an oil surface applied, and about 4 miles were of gravel with the top surface bound with a bituminous binder.

LOCATION OF STATE HIGHWAYS.

The commission last year continued its policy of filling in the gaps in the main lines of travel throughout the Commonwealth. It has been building, generally, in the smaller and poorer towns, where the roads are on main lines which are much used for through travel between the larger cities and towns in the Commonwealth and by tourists from other States.

It built on the main line toward Provincetown and extended the road toward Woods Hole, and also in Mashpee to connect Falmouth with Barnstable. Allotments were made for work on the road running north from the city of Pittsfield; on the road between Pittsfield and Springfield; also on the road between New Bedford and Taunton, and between Fall River and Providence. Considerable work was done on various routes leading from Boston to the north, west and south and to the Cape; also on the road north and south through the Connecticut River valley, on the roads between Worcester and Fitchburg, between Providence and Worcester, and from Fitchburg to the New Hampshire line. Work was also done along the Merrimac River to connect the northern cities with the seashore in Salisbury, as well as on several other secondary routes.

"SMALL TOWN" ROADS.

The sum of \$80,784.89, a portion of which was money allotted in 1911, and the remainder money carried over from former years which had not been expended, was spent during the past year on the so-called "small town" roads for their improvement. Nearly 46 miles were constructed during the year in 80 towns, and contracts were made for the construction of 8 miles in 17 other towns where the work has not been completed. Since work of this character was first started, a total of over 265 miles has been improved at a total cost of \$482,287.67.

The commission has heretofore co-operated with many towns under the "small town" act in improving sections of road upon what might be called secondary lines of travel, which were of benefit to the towns themselves and served as feeders to the State highway system.

The commission has available annually \$25,000 for use in the "small towns" of less than \$1,000,000 valuation, which make no contribution, \$25,000 for use in similar towns which contribute an equal amount, and \$25,000 for use in towns of over \$1,000,000 valuation, which contribute an equal amount.

For the last few years there has been so much interest in good roads in the various towns that the commission has not had nearly money enough available to meet the appropriations which were made by the towns themselves. In some instances, three times as much money has been appropriated as the commission was able to meet, and in consequence the towns' allotments have lapsed and the roads have not been improved.

The commission feels that it might be wise for the Legislature to consider the advisability of making more money available for this class of work, for the reasons which are more fully set forth in its recommendations for legislation.

As there has not been sufficient money available to meet all the demands made upon it, the commission has, in the main, adopted the policy of first complying with the requests of the smaller and poorer towns, which were not on through routes and where no State highway money had been appropriated, and also the towns where very little or no money had been allotted in the past. It has felt that this policy was the only fair and just one, because there are a very large number of towns in the Commonwealth which cannot possibly afford to build or maintain such roads as the community absolutely needs, and where the roads are not on the through lines of travel they cannot be aided from the State highway money or from the money available from the motor vehicle fees fund for use on through roads in towns.

MAINTENANCE.

With the increasing length of State highways, the increase in the through travel by automobile, and the rapid increase in the use of motor trucks for long distances in and out of the larger cities, the question of maintenance becomes of more and more importance.

During the year the commission spent something over \$500,000 in the maintenance of State highways, \$200,000 being pro-

vided by direct appropriation by the Legislature and something over \$300,000 being made available under the motor vehicle fees act.

It has been necessary to resurface many miles of State highway, especially those subjected to much automobile travel. On the through routes this has almost invariably been done with the use of some bituminous material.

The commission spent for the use of bituminous materials, and bituminous resurfacing with a surface coat or otherwise, as much money as the total amount available from the motor vehicle fees fund for the maintenance of State highways.

BITUMINOUS MATERIALS USED.

It has become more and more evident year by year that with the increasing automobile travel it is absolutely essential on the main through routes, at least, and on any roads that have many of these vehicles traveling over them, that some bituminous binder should be used to prevent the road from raveling, and that probably it will be more economical in the long run to incorporate the bitumen in the top course of stone. The application of these materials under pressure has been found to produce better and more uniform results than were secured by the old gravity method.

The commission has also been successful in applying some of the extremely heavy bituminous materials with a pressure distributor, the pressure being provided by an ordinary air pump operated by steam from the traction engine. This has been applied in grouting as well as in surface treatment, and it seems probable that in the future it may be possible to use some of the more lasting bituminous materials containing large quantities of asphalt by this method and thus secure more permanency in both construction and surface treatment.

BITUMINOUS MATERIALS USED.

During the past year the commission used over 1,500,000 gallons of various bituminous materials in the construction and surfacing of its roads, including various tars, tarvias and asphaltic oils sold under different trade names. The tars and oils

used conformed to the requirements of certain specifications. Samples were analyzed by Mr. H. W. Clark, chemist for the State Board of Health, at the State laboratory at Lawrence, some 240 samples being analyzed during the year.

Mr. Clark reports that, from a laboratory point of view, the materials were rather better during the past year than formerly; that there was, however, altogether too much variation between the different lots of what purported to be the same materials, sold under the same trade name, and that altogether too many of them frothed badly when heated. This lack of uniformity in the materials is largely responsible for the fact that while some of the roads on which these materials were used are now in very good condition, others are not. For instance, one asphaltic oil, used at Tyngsborough, had a viscosity of 390, while an oil sold under the same name used at North Truro had a viscosity of 540, and some used at Groveland had a viscosity of 590. Another asphaltic oil varied in viscosity from 240 (in Southborough) to 340 (in Chester). Further details may be found in the report of the chemist, which is printed in the Appendix.

During the year 1911 about 240 miles of road received either a bituminous surface treatment or were resurfaced with a bituminous top. Some of these roads had been treated the previous year. The commission spent for work of this character \$310,000.

Up to Dec. 1, 1910, over 308 miles of road had received one or more surface applications of oil. It will therefore be seen that about 60 per cent. of the State highways have either been built or have been given a surface coating of some bituminous material.

Some of the sections that were treated with oil or tar two or three years ago have had to be retreated. On the other hand, some roads which had considerable automobile travel were treated with a surface coating of asphaltic oil three years ago and are now in very fair condition, nothing having been done to them since except to patch the holes.

It now seems to the commission that a surface coat of asphaltic oil would not prove to be economical or satisfactory on a

road which has a large amount of heavy teaming, though it is satisfactory, or has been up to the present time, on roads which have a large amount of high-speed automobile travel, with but few heavily loaded teams.

The State highway in North Beverly was given a coat of heavy asphaltic oil, one-half gallon to the square yard, in the summer of 1910, but it did not wear satisfactorily. It began to wear out first on the north side of the road, where the heavily loaded ice teams traveled. The other side of the road, where they returned empty, remained in fairly good condition for a longer period of time. By the end of the season the oil was pretty well ground up and was almost entirely gone over the traveled portion in the center of the road. A large number of heavily loaded ice teams passed over this road daily, starting at the ice houses beyond North Beverly. This piece of State highway and many miles beyond, on the road to Newburyport, were treated in exactly the same manner with the same quality of oil. The whole road beyond the ice houses has been and is now in entirely satisfactory condition, showing conclusively that it was the teams cutting through the oil and down to the stone which churned it up into mud and then carried it off of the road. This year a reasonably satisfactory road was secured by applying a coat of one-quarter of a gallon of light asphaltic oil to the square yard. This light oil apparently fluxed back a part of the oil left on the road.

In general, other failures, not due to excessively heavy team travel, have been due to the qualities of the materials themselves, though in some cases they have been due to faulty application or to the fact that the road was not properly cleaned before the oil was applied.

It seems probable now that quite a few miles of the roads which had a surface treatment three years ago will only require extensive patching to carry them through another season, and that on others a little patching and a coat of one-quarter of a gallon of asphaltic oil to the square yard, instead of the half gallon which was first applied, will be sufficient to carry them through two seasons more.



Macadam Road with Oil Surface, Lakeville.

THE USE OF AUTOMOBILE FEES IN IMPROVING THE THROUGH ROUTES IN THE SMALLER TOWNS.

Twenty per cent. of the net amount available from the automobile fees was, by chapter 525 of the Acts of the year 1910, made available for use on through routes in the towns. This has enabled the commission to improve and aid in the improvement of many miles of road of much value to the automobilists and, in many instances, where the roads were of little value to the inhabitants of the towns.

Newburyport Turnpike.

Nearly \$18,000 has been spent on the Newburyport turnpike from this source, and \$600 has also been spent by the town of Newbury on the same road. This money was expended in the towns of Saugus, Lynnfield, Peabody, Danvers, Topsfield, Ipswich, Rowley and Newbury. About 26 miles of road have been partially constructed, repaired, improved and put into reasonable condition.

It may be possible to put in a little more money next year and improve the remaining bad sections of the road. The commission also hopes to be able to establish some system of constant maintenance, with the co-operation of the towns.

Northampton-Pittsfield.

This is a secondary route to the Berkshires. The sum of \$21,250 has been allotted by the commission from the motor vehicle fees fund, and work has been done in Williamsburg, Goshen, Cummington, Windsor and Hinsdale. The towns contributed \$2,600 besides what the State put in, Williamsburg giving \$1,600, Cummington \$500 and Windsor \$500. The commission has also for use on this road a special appropriation of \$10,000, made by the Legislature of last year. There are about 34 miles which should be constructed, repaired or improved on this road.

The work done in Williamsburg was done by the town and is deserving of special mention. It is of macadam and is a fair example of the water-bound type.

Quite a strip of gravel road was built in Goshen and a long stretch of the West Cummington road was improved.

The commission plans to use most of the special appropriation in improving the East Windsor Hill road. This is the worst section between Northampton and Pittsfield. It will be some years, however, before all of this road can be put in good condition, if the work is to be done from funds such as are now at the disposal of the commission.

Shelburne Mountain.

The commission has allotted \$5,500 from the motor vehicle fees fund, the town of Greenfield appropriated in 1910 and 1911 \$4,300 and the town of Shelburne \$2,000 for use on this road. There is also a special appropriation of \$10,000 available.

The commission has let a contract in connection with the money appropriated by the town of Greenfield, allotting one-half of the special appropriation to be spent in that town for building the road on the Greenfield end, so that it will connect with the improvements which were made last summer on Shelburne Mountain. The other \$5,000 of the special appropriation will be spent, with any money that the town of Shelburne may be willing to contribute, in improving the road on the Shelburne side of the mountain as far as the money will go. There will still be left, however, a good many miles of poor road upon this route. This season the work was practically completed from Green River bridge in Greenfield to a point about one mile west of the Shelburne-Greenfield line. This is a very expensive road to build, and any money appropriated by the town or State will serve to make available sooner a now unsafe way. This is a part of the Boston-Greenfield-North Adams route.

Provincetown Road.

During the past year the commission continued the work which it began in 1910, and allotted money from the automobile fees for the improvement of the road to Provincetown. It has improved the grade upon five of the worst hills upon this road, making a sand-and-oil road, and has continued with one gang

of men which worked all the time, continuously, in improving the worst sections. It has spent in this work \$13,245. The work was done in the towns of Wellfleet and Truro.

Truro.

The Legislature last year made available a special appropriation of \$500 for use in the town of Truro on the road leading along the beach to Provincetown, and this money was spent by the commission in connection with the other work above mentioned.

Connecticut Valley.

The sum of \$14,675 from the motor vehicle fees fund has been spent in the Connecticut valley in improving various stretches of poor road which it did not seem desirable at the present time to include in the State highway system. This money has been spent in the towns of Amherst, East Longmeadow, Deerfield, Whately and Wilbraham, on various important through roads.

Worcester-Athol.

There is a secondary through route leading from Athol to Worcester and to points on the Cape and in Rhode Island. The commission has allotted \$5,500 on this route, the money being spent in Barre and Athol, the town of Barre contributing \$4,500 and the town of Athol contributing \$1,000.

Hudson (N. Y.)-Pittsfield.

The commission has allotted \$5,000, and the towns and individuals have contributed \$2,000, to build a short stretch of road in the town of Egremont to connect with the New York State highway.

The State of New York constructed a State highway, over 20 miles in length, from the town of Hudson to the Massachusetts line, in the town of Egremont, and in order to improve the grade it built around the hill, ending at the Massachusetts line in a bank some 10 feet high, so that the road would be of no possible use unless a short piece of road were constructed to

connect with the existing road in New York State. The commission is therefore building the short section of road necessary to connect with this road.

Some of the other places in which part of the automobile fees has been used are Templeton and Winchendon, on the road to the New Hampshire line; Becket and Lee, keeping the so-called Jacob's Ladder road to Pittsfield in reasonably good condition; and Montague, on the main road between Greenfield and Fitchburg.

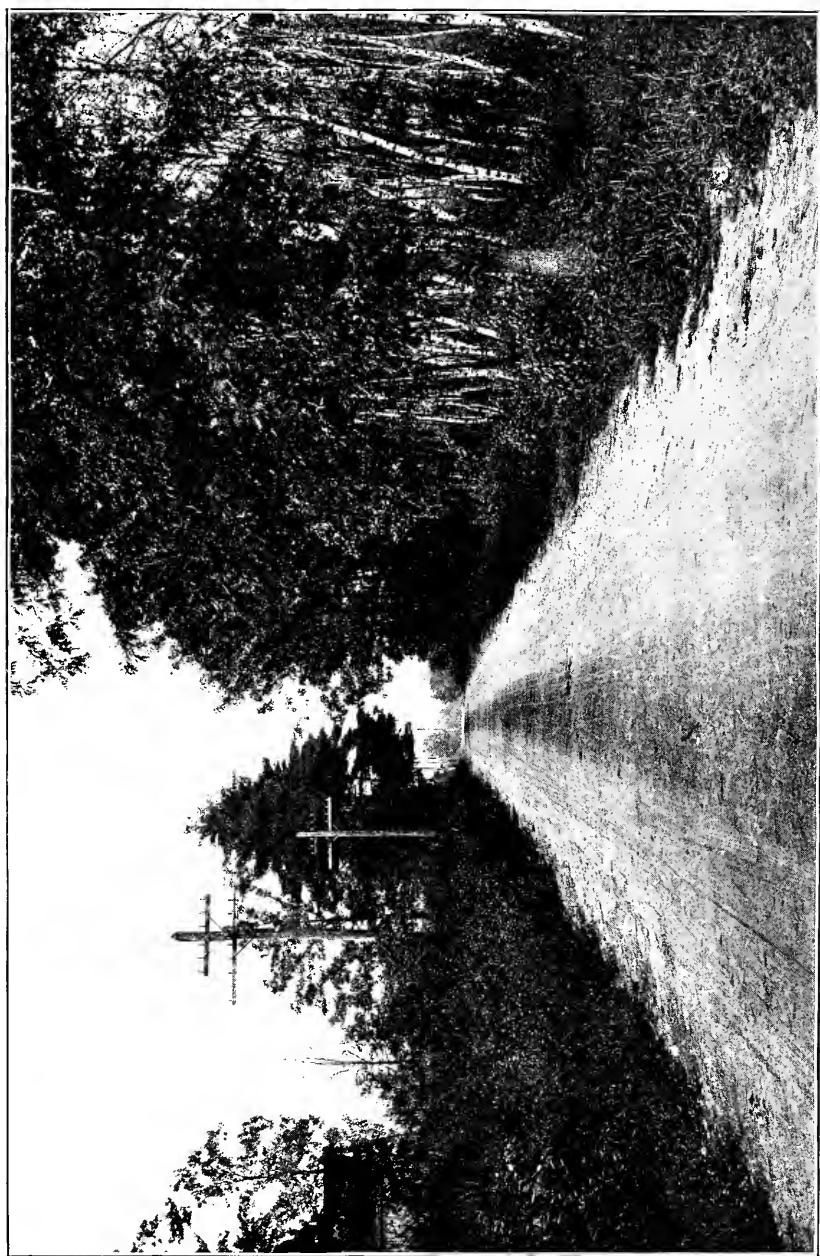
The balance of the money was spent on various important through routes, sometimes small amounts being used to improve bad underpasses under railroads and on approaches to bridges, where the commission felt that no State highway should be laid out because of the dangerous condition of the underpass or crossing.

The total amount appropriated in 1910 and 1911 was over \$107,000. The total amount contributed on the same routes by the towns was \$21,000, and the special appropriations which were made for these same roads brought the total amount available up to \$134,943.65.

CONDITION OF STATE HIGHWAYS.

Speaking generally, the condition of the State highways at the end of the year 1911 was better than it had been at any time in the past. There has not been enough money available to enable the commission to resurface or even to surface with a bituminous material many miles of State highway in various parts of the State that required such treatment, nor has there been money enough to even adequately maintain them. It has been necessary to adopt the policy of making the money available go as far as it would, and take up first the more important roads and those that were most in need of treatment or were deteriorating most rapidly.

On about 42 miles of road the commission had to use a thin coat of light oil which would only last a part of the season, in order to prevent them from raveling too much. It hopes, however, that by the end of next year it will have almost all of the roads upon the main through lines treated with some bituminous



Gravel Road, Maynard.

material which will prevent them from being unduly damaged by the automobile travel. It has already so protected most of the more important roads on the through routes.

BRIDGES AND CULVERTS.

Most of the bridges built during the year have been of reinforced concrete. A detailed account of them will be found in the chief engineer's report.

The commission also furnished plans for a bridge which was built by the Norfolk county commissioners.

WORK UNDER SPECIAL ACTS.

Florida or Hoosac Mountain Road.

The Legislature of 1911 appropriated \$75,000 to improve the road from the North Adams-Florida line to the Deerfield valley. Soon after the money was made available the commission's engineers began studying this proposition, and they have made surveys of various routes with a view to getting the easiest possible grade over what is undoubtedly the finest scenic route in Massachusetts.

Leaving the present highway at the top of Whitcomb's Hill, the proposed road bears south toward Cold River, and follows a line which meets the old highway at a point not far from Charlemont village. The route from the North Adams line to Charlemont village is about 14 miles in length, and involves the construction of but one bridge. This line shows a maximum grade of about 7 per cent., and eliminates the terrors of the narrow and steep climb which at present exists from Hoosac Tunnel village to Florida village.

Just what this contemplated road will cost, the commission is as yet unable to state, but if it develops that the funds available are insufficient the commission will so inform the Legislature at no very distant date. It believes that the great and General Court should be informed before the work is begun, in order that any further instructions which seem advisable may be given.

Highway in the Town of Salisbury.

Under chapter 746 of the Acts of the year 1911 the commission was authorized and directed to lay out and construct, within one year from the passage of the act, a highway between the marshes and the beach in Salisbury, 60 feet wide, provided that the owners and abutters should release all claims for damages for land, construction, changes of grade, sloping, etc., and that such releases were duly executed before said highway was constructed or any land taken therefor. There has been some difficulty in securing the releases as required by the act, and the commission is now informed that probably they cannot be secured unless some change is made in the location.

Under the peculiar wording of the act it would seem that it might be interpreted to mean that the commission was ordered to lay out and *construct* a highway 60 feet wide. The amount authorized to be expended on said highway was only \$15,000. A highway 60 feet wide could not be constructed for anything like that sum of money.

It seems that there might be a delay in securing the releases, and if it is the desire of the Legislature that the commission should build this road, the time should be extended, and the act should be so amended as not to require a specified width, but, for instance, a layout of 50 feet, or of such width as the commission may deem sufficient, and it should be provided that the traveled way should be constructed of such width as the commission may determine to be requisite and necessary. It seems evident that there is not the slightest necessity for the construction of a way 60 feet in width at that particular place, and that the standard State highway width of about 21 feet would be amply sufficient.

Revere Traffic Road.

Under the provisions of chapter 646 of the Acts of 1910, the commission was authorized to expend the sum of \$125,000 during that year in purchasing, or taking by right of eminent domain, land in the town of Revere, from a point at or near the junction of Ocean Avenue and Revere Street to a point at or near the Point of Pines station, adjoining the metropolitan

boulevard, for the purpose of securing a 60-foot location for a highway.

As the commission reported last year, it had careful surveys and studies made of the whole situation, as the location of the road would be largely determined by the question of what was to be done on any extension thereof on the west side of Revere Street.

By chapter 557 of the Acts of 1911, the time was extended, at the suggestion of the commission, so that the money should be available for a longer time.

The commission directed Mr. Ralph S. Bauer to see what could be done in the way of securing options, and it is evident that options cannot be secured for the amount available, \$125,000, if a road is to be built between the Revere Beach & Lynn Railroad and the beach. It might be possible to secure the land upon the other side of the railroad if a bridge were built across the railroad.

It also appeared that the Boston & Maine Railroad had a very wide location along the marshes, some of which might be desirable as a location for a highway, and several projects were presented to the Legislature, looking to the construction of a tunnel to East Boston and the construction of the main line of the Boston & Maine Railroad through this section of the country.

It seemed evident that if the railroad were to be constructed in this place, very large and extensive changes would have to be made in the location of the various railroad tracks, and that if a traffic road were to be constructed at this point the work should be done in conjunction with the work done by the railroad company, or so that it would not interfere therewith.

It might also be possible to make some rearrangement of tracks at that point whereby the highway could be located upon land now under the control of either the Boston & Maine Railroad Company or the Revere Beach & Lynn Railroad Company, provided any part of that location was found to be unnecessary for railroad uses.

The commission, therefore, has done nothing further in the matter, thinking it better to wait until it is more certain what the future development of that section of the country is to be.

Marblehead Breakwater.

Under the provisions of chapter 578 of the Acts of 1910, \$50,000 was appropriated for the construction of a breakwater and highway along the causeway connecting Marblehead and Marblehead Neck. The commission reported last year that it had prepared plans for a concrete sea wall on the ocean side and a concrete face on the masonry wall on the harbor side, with a roadway between at an elevation greater than the old road.

When last year's report was written the work was in progress. It was completed early in the spring of 1911, and the commission thinks that the town authorities and the public are very well satisfied with the result.

POLES AND WIRES UPON HIGHWAYS.

With the increase in the number of poles located upon the highways, not only for telegraph, telephone and street railway wires, but also for street lighting, and especially for wires carrying high tension electrical currents, many new difficulties have arisen. The high-tension current wires, especially if located near the telegraph and telephone wires, cause induction and seriously interfere with, if they do not entirely destroy, the service that is rendered over the telegraph and telephone wires. Also, in some cases, it is dangerous to the repairmen when the high-tension wires are so located that they might be touched inadvertently, or if they happen to break and charge any of the other wires with a current of dangerous voltage.

Believing that this matter is one of great importance, and that it should be possible to secure some standard specifications, not only as to the construction, but also as to the location of the various poles and wires and their distance from each other, the commission has taken the matter up with several of the larger companies, to secure suggestions as to what would be the best method of location and construction, and it intends in the near future to attempt to draw some standard specifications which will be applicable to all highways and to the location of poles and wires thereon.

It is believed that some such specifications are needed, not only on State highways, but on all the highways throughout the Commonwealth where poles are located.

TREES ON STATE HIGHWAYS.

Insect Pests.

During the past year the work of suppressing insect pests on all State highways east of the city of Worcester was done under the direction of the State Forester, Mr. F. W. Rane, this arrangement being a continuation of that of several past years. The results obtained have been most satisfactory.

Under authority given last year, the trees have been sprayed not only to exterminate the gypsy and brown-tail moth, but also to prevent their devastation by the elm-leaf beetle. The presence of that pest has made it necessary for the commission to spray trees in many places, especially on the Cape and in the western part of the State, where work had not been necessary before on account of brown-tail or gypsy moths.

Forester's Department.

The work of preventing the ravages of insect pests, west of the city of Worcester, was in charge of the forester of the commission, Mr. E. W. Breed, whose report will be found in the Appendix. Under his supervision work was done in some 30 cities and towns.

Since the work of planting trees on State highways was authorized, 15,217 trees have been planted on the borders of the highways. These trees have been planted in 63 towns.

The commission is also preparing, as far as possible, to use hedges or quick-growing trees to replace guard rails, as it believes that it will be more economical to protect the roadsides with trees or strong hedges than to maintain and paint guard rails which are continually decaying.

Trees in the Nursery.

There are now 561 trees on hand in the nursery, of fair size for planting, and 4,956 smaller trees which are being developed for future use.

SUGGESTIONS FOR LEGISLATION.

Some law should be passed to prevent undue damage to highways by traction engines, heavy motor trucks, etc.; and when any serious damage is done by any person to a highway, such person should be required to repair the same, or the cost should be recovered by the authorities in charge of the repair and maintenance of the road.

The commission suggests the passage of a law providing that no person shall operate upon the highways in this Commonwealth any vehicle with wheels so constructed as to cause any unusual amount of damage to such highways, and that no traction engine, motor truck, or other vehicle shall be operated on the highways, having upon the wheels any clamps, ribs, or other device which may cut into or injure the road surface.

Motor vehicles are being run at comparatively high rates of speed and constantly increasing weights. Traction engines are likely to become numerous in this country, and many of them are fitted with steel clamps or ribs which, with the weight of the vehicle (from 6 to 18 tons), cut directly into the surface of the highway, whether constructed of macadam or bituminous material. With an increase in this traffic in the future, many of the bridges in the Commonwealth, especially in the poorer towns, will be found insufficient; such bridges are likely to be destroyed and accidents may happen thereon.

The commission suggests that the Legislature consider whether it would not be advisable to have some law regulating the weight of the vehicles, the kind of wheels that should be used, and the speeds at which such vehicles should be operated.

It might be well to have a law providing that no traction engine, motor vehicle or other vehicle of greater weight than 6 tons, including the vehicle and load, shall pass over any bridge insufficient to carry that weight, and that any damage to such a bridge shall be paid by the owner of the vehicle, provided the authorities post notices to that effect at such bridges. The law might also provide for the issuing of permits allowing heavier vehicles or weights to be moved.

The commission suggests that an act be passed in 1912, substantially in the form in which it has been passed heretofore (in 1902 and 1907), appropriating the sum of \$5,000,000 for the use of the commission for the construction of highways for the five years beginning with the year 1913, one-fifth of said appropriation to be made available each year.

Under the act of 1907, the amount of \$500,000 a year has been available, since the year 1908, for the construction of State highways and the improvement of roads in so-called "small towns." The increased appropriation is suggested for the reason that the appropriation of \$500,000 a year is inadequate, in the opinion of the commission, to enable it to complete the main important through lines of travel within a reasonable length of time.

In this connection it should be remembered that many of the neighboring States are appropriating very much larger sums of money than are available in this State, and are, therefore, building main lines of highway much more rapidly.

The commission is informed that the highway commissioner of Connecticut has \$3,000,000 available for work in 1912, and at the end of the year will have spent more money than the State of Massachusetts. New York has appropriated \$50,000,000 for a period of ten years, making \$5,000,000 available each year, and the commissioners of that State have stated publicly that they will have \$22,000,000 available for work during the ensuing year. This will enable them to build several lines of road to the Massachusetts boundary, where this Board will be utterly unable to connect with the New York roads. The State of Rhode Island, from time to time, has appropriated quite large sums of money, considering the size of the State, and has most of its important main through lines of road almost entirely completed.

Even with the \$1,000,000 a year suggested, the commission cannot, of course, compete with the States that have so much money available, but the money could undoubtedly be spent economically, without any large increase in the office expenses or any proportionately large increase in engineering, due to

the fact that longer sections of road could be laid out and constructed at a given time. This money would enable the commission to complete or come near completing several of the most important through routes, filling in the missing links.

It must be remembered that the automobiles are paying a large sum into the State treasury, nearly \$400,000 a year being available for the maintenance of State highways and for the construction, improvement and repair of through roads in the smaller towns. If Massachusetts roads are to maintain the same reputation in the future as they have had in the past, it will be necessary to make this money available. Perhaps of equal importance is the money which would thereby be made available for work in the so-called "small towns," where it is manifestly impossible, with the money available, to build State highways. Under the highway act 15 per cent. of the money appropriated is available for the improvement of roads in such towns, and this money has, in the opinion of the commission, been of great value, not only to the towns themselves, but to the traveling public, by reason of the excellent facilities afforded in providing for connections with State highways.

During the past few years the commission has not had nearly enough money available to meet appropriations made by towns desiring aid, under the provisions of the statute whereby certain municipalities making appropriations for particular roads can be allotted an equal amount from the State. If \$1,000,000 a year is made available, the commission will be able to meet more propositions of that kind, and thus not only provide good roads, but also aid greatly in instructing the towns as to the best methods of using the money that they have.

The commission feels that in many cases where serious automobile accidents occur in other States, in which Massachusetts operators, licensed by this Board, are involved, it would be desirable for the commission's investigators to go into those other States and investigate the causes of the accidents and make reports thereon.

As the question has been raised as to whether the expense so incurred was authorized without special authority from the

Governor and Council in each instance, the commission would suggest that it be authorized by law to incur such expense, the amount to be charged to the automobile fees.

AUTOMOBILE DEPARTMENT.

Examinations for Licenses.

The examiners of the commission held 6,152 examinations during the fiscal year of 1911. This was an increase of 719 over the preceding year.

Four thousand, six hundred and forty-eight persons were examined, of whom 4,119 finally succeeded in passing the examinations and 529 failed. One thousand, four hundred and twenty-four persons failed upon their first examination, or over 31 per cent., and over 11 per cent. did not succeed in passing at all. Almost all of the failures were upon the road test.

More than half the examinations were held in Boston, and the balance in Brockton, Fall River, Fitchburg, Lowell, New Bedford, Pittsfield, Salem, Springfield, Worcester, Oak Bluffs and Lawrence. Further details will be found in Appendix B.

Automobile Accidents and Investigations.

The table below shows the accidents in which automobiles have been involved, of which the commission has had any notice through the press, or otherwise, for the fiscal years of 1910 and 1911:—

<i>Deaths, Injuries, Accidents.</i>		1910.	1911.
Total number killed,		77	110
Total number injured,		963	1,248
Total number accidents,		1,182	1,531
Total number accidents in day time,		867	1,098
Total number accidents after dark,		315	433
Total number accidents on country roads,		222	280
Total number accidents on city or town streets,		960	1,251

Of the total number killed or injured in 1911, 538 were occupants of automobiles, 584 were pedestrians, 73 were bicycle riders, 154 were occupants of carriages and 9 were street-car passengers.

It is interesting to note that the number of accidents on country roads was 314 in 1909, 222 in 1910 and 280 in 1911. The number of automobiles registered has increased from 31,360 in 1910 to 38,907 in 1911.

Death Cases.

Our investigators have investigated 114 deaths, 110 of which occurred in Massachusetts, 2 in Connecticut and 2 in Maine, Massachusetts operators having been involved in the 4 cases investigated in other States.

One of the 110 deaths was a case of asphyxiation by gasoline fumes.

The more serious accidents have been investigated, reported on by the investigators, and acted upon by the commission, and the investigators made 39 prosecutions in court.

In July the commission found it necessary to appoint another examiner.

Further details of the work of the investigating department will be found in Appendix B.

Court Abstracts.

During the year 1911, 3,322 abstracts of court records were received from the courts, against 3,706 in 1910. These records came from 68 of the 83 courts in the Commonwealth. In many cases it has been necessary to communicate with the clerks of the courts in order to secure these abstracts of their records.

The abstracts show that 2,911 persons were convicted of violations of the automobile law, and 104 were found not guilty, 305 cases were appealed, 572 complaints were placed on file, and 102 were *not prossed*. Eighteen defendants were defaulted and 8 were committed to imprisonment. The complaints were as follows:—

For manslaughter,	2
For overspeeding,	910
For reckless operating,	94
For operating while intoxicated,	25
For using automobile without authority,	41

For endangering lives and safety of public,	12
For failing to stop after causing injury,	18
For improper display or no register number,	51
For operating without a license,	217
For operating without carrying registration certificate, . .	57
For operating an unregistered motor vehicle,	53
For refusing to stop when signalled by officer,	61
For operating with unlighted lamps,	183
For violations of park rules,	270
For failing to give signal when approaching intersecting way,	1,165
For miscellaneous offences,	203

The abstracts show that \$26,537 was imposed as fines and \$2,182 for violations of the metropolitan park rules. Of course, all of this amount was not, necessarily, collected, as many cases were appealed.

Special Regulations.

Only four hearings were held on special regulations made by the municipal authorities, one being in Marblehead, which was a request to make one of its streets a one-way street, to avoid collisions at a dangerous corner.

One town which had excluded automobiles from particular roads cancelled those regulations on most of the roads from which motor vehicles had been excluded.

Automobile Hearings.

These hearings are held either upon complaints or as a result of investigations made by the commission's investigators, or at the request of the operators whose licenses have been suspended or revoked. They have occupied the entire day each Wednesday and often other days in the week as well. During the past year the commission has held 240 such public hearings.

In addition to these hearings, the commission receives every week a large number of reports of investigations made by its investigators, and these are read and acted upon by the commissioners. There were 504 such reports made this year as against 429 last year.

Suspension and Revocation of Licenses.

Below is a summary of the action taken by the commission in the various cases, and the causes of said action.

Action taken on Formal Complaints after Hearing.

Licenses revoked,	4
Licenses suspended,	11
Registration certificate cancelled,	1
Complaints placed on file,	8
Complaints dismissed,	8
Operators cautioned,	3
<hr/>	
Total hearings on formal complaints,	35

Suspensions and Revocations.

Licenses revoked,	95
Licenses suspended,	254
Licenses cancelled,	3
Registration certificates suspended,	2
Dealer's registration certificate suspended,	1
Motor cycle registration certificate revoked,	5
<hr/>	
Total suspensions and revocations,	360

Suspensions and revocations resulting from court convictions,	75
Suspensions and revocations after hearings on formal complaints,	15
Suspensions and revocations after investigation, on which hearings were given in some cases,	270
<hr/>	
	360

Causes of Suspensions and Revocations.

Reckless operation,	41
Operating while under influence of intoxicating liquor,	14
Refusing or neglecting to stop after accident,	8
Accidents resulting in death,	95
Improper operation,	137
Three overspeeding convictions,	2
Operating automobile without owner's permission,	24
Improper person,	21
Other offences,	18
<hr/>	

Deaths.

There were 105 accidents which occurred in Massachusetts resulting in 110 deaths, and 2 accidents which occurred in other States, and in which Massachusetts operators were involved, resulting in 4 deaths; making a total of 107 fatal accidents investigated by the commission. In 3 of these cases 2 operators were involved, making a total of 110 operators whose cases were considered. These were disposed of as follows:—

Registration certificate revoked, the owner having no license, .	1
Licenses revoked,	15
Motor cycle registration certificates revoked,	2
Licenses suspended, and reinstated after investigation and hearing,	62
Licenses suspended, final hearings pending,	14
Motor cycle registration certificate suspended, final hearing pending,	1
No action, because of death of operator,	5
No action, because operator had no Massachusetts license, . .	10
	<hr/>
	110

Automobile Fees.

During the year 1911, 38,907 automobiles and 3,658 motor cycles were registered. Besides these, there were 870 manufacturers' and dealers' registrations issued.

The amount of fees collected from the automobiles was \$380,760, an average fee of \$9.78 each.

From the 870 manufacturers' and dealers' registrations, \$24,849 was collected.

From the 3,658 motor cycles \$7,030 was collected, and \$64,778.95 was collected in operators' license fees, etc.

During the year 51,950 operators' and chauffeurs' licenses were issued or renewed.

The total amount collected from registration fees, license fees, sundry receipts, etc., was \$477,417.95. From this amount had to be paid the cost of number plates, salaries of clerks, investigators, examiners, etc., in the automobile department, as well as many other expenses. Eighty per cent. of the balance of the money is by law available for the repair of State high-

ways, and 20 per cent. is available for the repair, improvement and construction of roads on through routes of travel in the towns, under authority of chapter 525 of the Acts of 1910.

EXPENDITURES.

The following is a summary of the expenditures of the Massachusetts Highway Commission from Dec. 1, 1910, to Nov. 30, 1911:—

CONSTRUCTION EXPENDITURES.

TOWN OR CITY.	Amount.	Totals.
<i>Barnstable County.</i>		
Barnstable,	\$7,203 51	\$30,949 29
Bourne,	7,323 32	
Brewster,	27 85	
Chatham,	17 61	
Dennis,	17 61	
Eastham,	1,712 18	
Falmouth,	2,618 78	
Harwich,	1 14	
Mashpee,	7,063 06	
Orleans,	6 25	
Sandwich,	4,925 59	
Yarmouth (north),	11 35	
Yarmouth (south),	21 04	
<i>Berkshire County.</i>		
Adams,	\$4,885 93	25,045 31
Cheshire,	5,555 91	
Hancock,	6 53	
Hinsdale,	1 14	
Lee,	5 23	
Lenox,	5 34	
Lanesborough,	14,542 80	
North Adams,	14 20	
Pittsfield,	14 20	
Richmond,	6 53	
Stockbridge,	2 39	
Williamstown,	5 11	
<i>Bristol County.</i>		
Attleborough,	\$0 80	\$55,994 60
Dighton,	8,291 43	
Easton,	68	
North Attleborough,	80	
Norton,	80	
Seekonk,	6,476 73	
<i>Amounts carried forward,</i>	\$14,771 24	

CONSTRUCTION EXPENDITURES — *Continued.*

TOWN OR CITY.	Amount.	Totals.
<i>Amounts brought forward, . . .</i>	\$14,771 24	\$55,994 60
Somerset,	6,021 20	
Swansea,	4,357 02	
Taunton,	2 27	25,151 73
<i>Dukes County.</i>		
Chilmark,	\$2,475 21	
Edgartown,	2 27	
Oak Bluffs,	2 27	
Tisbury,	2 27	
West Tisbury,	2 27	2,484 29
<i>Essex County.</i>		
Andover,	\$10 11	
Beverly,	8 18	
Gloucester,	25 75	
Groveland,	1 36	
Hamilton,	29 16	
Haverhill,	3,416 96	
Ipswich,	9,420 63	
Merrimac,	410 60	
Methuen,	1 36	
Newbury,	1 36	
Newburyport,	1 36	
North Andover,	23,199 24	
Rockport,	2,420 22	
Rowley,	4,647 98	
Salisbury,	9,247 07	
Wenham,	4 20	
West Newbury,	148 04	52,993 58
<i>Franklin County.</i>		
Bernardston,	\$11,476 78	
Deerfield,	7,270 31	
Erving,	15,448 86	
Greenfield,	765 83	
Montague,	1,241 38	
Northfield,	1 14	
Orange,	195 73	
Sunderland,	1 14	
Whately,	2,590 98	38,992 15
<i>Hampden County.</i>		
Agawam,	\$9,494 53	
Brimfield,	1 70	
Chester,	19,679 22	
<i>Amounts carried forward, . . .</i>	\$29,175 45	\$175,616 35

CONSTRUCTION EXPENDITURES — *Continued.*

TOWN OR CITY.	Amount.	Totals.
<i>Amounts brought forward, . . .</i>	\$29,175 45	\$175,616 35
Chicopee,	4 83	
Holyoke,	6,290 80	
Monson,	17 94	
Palmer,	776 44	
Wales,	57	
Westfield,	12 50	
West Springfield,	1 14	
Wilbraham,	237 37	
<i>Hampshire County.</i>		36,517 04
Amherst,	\$2 56	
Easthampton,	13 64	
Granby,	10,977 79	
Hadley,	9 09	
Hatfield,	13,551 61	
Huntington,	5 11	
Northampton,	7 39	
South Hadley,	2 84	
Southampton,	30 01	
Ware,	1,322 88	
<i>Middlesex County.</i>		25,922 92
Acton,	\$5 75	
Ashby,	7,949 82	
Ashland,	2,784 50	
Bedford,	1 47	
Billerica,	3 83	
Boxborough,	5 73	
Burlington,	2 06	
Chelmsford,	5,912 92	
Concord,	3 67	
Dracut,	1 91	
Framingham,	1,032 53	
Groton,	4 99	
Holliston,	11,745 50	
Hudson,	4 12	
Lexington,	2 84	
Littleton,	12 48	
Lowell,	18 53	
Marlborough,	7 95	
Natick,	25 07	
North Reading,	1,148 70	
Pepperell,	4,055 50	
Reading,	12 15	
Somerville,	47 10	
<i>Amounts carried forward, . . .</i>	\$34,789 12	\$238,056 31

CONSTRUCTION EXPENDITURES — *Continued.*

TOWN OR CITY.	Amount.	Totals.
<i>Amounts brought forward, . . .</i>	\$34,789 12	\$238,056 31
Stoneham,	11 11	
Sudbury,	2 84	
Tewksbury,	3 97	
Townsend,	4,970 76	
Tyngsborough,	11,529 89	
Wayland,	2 84	
Wilmington,	16,195 88	
Winchester,	253 76	
		67,760 17
<i>Norfolk County.</i>		
Bellingham,	\$0 57	
Canton,	118 44	
Franklin,	3,901 73	
Norfolk,	4 77	
Norwood,	7 61	
Plainville,	5,877 00	
Stoughton,	68	
Walpole,	469 03	
Wellesley,	88 16	
Westwood,	5 23	
Weymouth,	3,922 94	
Wrentham,	4 77	
		14,400 93
<i>Plymouth County.</i>		
Abington,	\$5,891 28	
Brockton,	68	
Lakeville,	26,345 86	
Marshfield,	185 34	
Middleborough,	3 64	
Plymouth,	9,080 65	
Scituate,	135 94	
Wareham,	703 78	
		42,347 17
<i>Worcester County.</i>		
Ashburnham,	\$841 89	
Auburn,	48 86	
Athol,	9 89	
Barre,	22 73	
Blackstone,	117 86	
Brookfield,	67 98	
Charlton,	19,379 56	
Fitchburg,	16 03	
Gardner,	7 27	
Grafton,	3 98	
Hardwick,	1 14	
<i>Amounts carried forward, . . .</i>	\$20,517 19	\$362,564 58

CONSTRUCTION EXPENDITURES — *Concluded.*

TOWN OR CITY.	Amount.	Totals.
<i>Amounts brought forward, . . .</i>	\$20,517 19	\$362,564 58
Harvard,	4,725 03	
Holden,	8 52	
Lancaster,	1 70	
Leicester,	12 79	
Leominster,	1 14	
Lunenburg,	2,538 25	
Milford,	5,904 47	
Milbury,	2 84	
Northborough,	2,629 49	
North Brookfield,	10 60	
Oxford,	18 18	
Paxton,	7 95	
Phillipston,	1,554 33	
Princeton,	19 89	
Rutland,	3 98	
Shrewsbury,	3 41	
Southborough,	57	
Southbridge,	57	
Spencer,	2,812 94	
Sterling,	102 75	
Sturbridge,	57	
Templeton,	516 88	
Uxbridge,	828 83	
Warren,	9 94	
Webster,	45 53	
West Boylston,	2 27	
West Brookfield,	11 65	
Westminster,	11 25	
Worcester,	6 25	
		42,309 76
		\$404,874 34

EXPENDITURES UNDER "SMALL TOWN" ACTS.

[Chapter 47, Revised Laws, and Chapter 279, Acts of 1908.]

Alford (two allotments),	\$40 00
Ashburnham (two allotments),	1,850 00
Becket (two allotments),	838 88
Berlin,	400 00
Bernardston,	200 00
Blandford (two allotments),	2,791 16
Bolton (two allotments),	200 00
Burlington (two allotments),	3,928 40
Carlisle,	700 00
Carver,	2,000 00
Charlemont (two allotments),	1,200 00
Chester,	51 84
Chesterfield (three allotments),	1,815 43
Colrain (two allotments),	900 00
Conway (two allotments),	900 00
Cummington,	550 68
Dana,	775 00
Danvers,	3,155 00
Dracut,	2,000 00
Dunstable,	20 00
East Bridgewater,	5,000 00
Eastham,	911 62
Easthampton,	1,956 80
Egremont (two allotments),	1,300 00
Florida,	59 40
Georgetown,	400 00
Gill (two allotments),	800 00
Granville (three allotments),	2,000 00
Greenwich (three allotments),	1,100 00
Halifax,	25 00
Hampden (three allotments),	800 00
Hancock (two allotments),	790 00
Hanson,	1,000 00
Hawley,	550 00
Holden (two allotments),	1,200 00
Hudson,	1,000 00
Huntington,	885 08
Lakeville,	1,500 00
Leyden,	400 00
Middlefield,	46 26

Amount carried forward, \$46,040 55

Amount brought forward,	\$46,040 55
Middleton,	400 00
Millis (two allotments),	1,100 00
Monroe,	200 00
Monterey,	32 76
Montgomery,	36 00
New Ashford,	400 00
New Braintree,	10 00
New Marlborough (two allotments),	1,554 58
New Salem (two allotments),	750 00
Norfolk,	525 00
North Andover (two allotments),	1,000 00
North Reading,	2,000 00
Norwell,	1,200 00
Oakham (two allotments),	520 00
Orange,	1,000 00
Otis (two allotments),	1,095 25
Pelham (two allotments),	800 00
Peru,	360 00
Petersham,	1,000 00
Plainfield (three allotments),	824 84
Plymouth,	9 00
Plympton,	450 00
Prescott (two allotments),	600 00
Rehoboth,	2,300 00
Richmond,	750 00
Rowe (two allotments),	450 00
Russell (four allotments),	1,393 85
Sandisfield,	10 00
Sheffield (two allotments),	451 74
Sherborn (two allotments),	600 00
Shirley,	700 00
Savoy,	1,121 83
Shutesbury (two allotments),	600 00
Southampton (three allotments),	1,208 71
Southwick (two allotments),	1,034 95
Stow,	25 00
Topsfield (two allotments),	1,500 00
Tyringham (two allotments),	217 96
Warwick (three allotments),	1,250 00
Washington (two allotments),	89 27
Westhampton (two allotments),	1,200 00
Westport,	180 00
Amount carried forward,	\$76,991 29

<i>Amount brought forward,</i>	\$76,991 29
West Stockbridge (two allotments),	910 00
Williamsburg,	1,000 00
Windsor,	500 00
Worthington (two allotments),	1,383 60
	<hr/>
	\$80,784 89

REPAIR AND MAINTENANCE EXPENDITURES.

[Under Chapter 555 of the Acts of 1911.]

TOWN OR CITY.	Amount.	Totals.
<i>Barnstable County.</i>		
Barnstable,	\$2,138 90	
Bourne,	427 64	
Brewster,	858 03	
Chatham,	755 88	
Dennis,	781 71	
Eastham,	414 18	
Falmouth,	3,857 63	
Harwich,	989 79	
Orleans,	606 92	
Provincetown,	796 69	
Sandwich,	531 09	
Truro,	524 93	
Wellfleet,	824 09	
Yarmouth (north),	547 62	
Yarmouth (south),	808 22	
		\$14,863 32
<i>Berkshire County.</i>		
Adams,	\$2,403 42	
Becket,	1,086 37	
Cheshire,	1,742 30	
Clarksburg,	101 46	
Dalton,	858 71	
Great Barrington,	686 66	
Hancock,	10,174 99	
Hinsdale,	210 58	
Lanesborough,	83 72	
Lee,	2,108 64	
Lenox,	7,789 61	
North Adams,	4,822 11	
Pittsfield,	8,483 15	
Richmond,	595 86	
Stockbridge,	1,157 46	
Williamstown,	2,274 31	
Windsor,	136 70	
		44,716 05
<i>Amount carried forward,</i>		\$59,579 37

REPAIR AND MAINTENANCE EXPENDITURES — *Continued.*

TOWN OR CITY.	Amount.	Totals.
<i>Amount brought forward,</i> . . .	.	\$59,579 37
<i>Bristol County.</i>		
Acushnet,	\$211 26	
Attleborough,	486 23	
Berkley,	125 69	
Dartmouth,	503 94	
Dighton,	1,024 62	
Easton,	61 91	
Fairhaven,	123 90	
Freetown,	258 37	
Mansfield,	131 10	
North Attleborough,	460 13	
Norton,	749 10	
Raynham,	64 90	
Rehoboth,	779 99	
Seekonk,	366 46	
Somerset,	1,547 02	
Swansea,	590 94	
Taunton,	380 32	
Westport,	158 03	
		8,023 91
<i>Dukes County.</i>		
Chilmark,	\$268 70	
Edgartown,	126 45	
Oak Bluffs,	222 57	
Tisbury,	217 30	
West Tisbury,	80	
		835 82
<i>Essex County.</i>		
Amesbury,	\$2,184 77	
Andover,	423 86	
Beverly,	3,045 89	
Essex,	68 27	
Gloucester,	1,319 87	
Groveland,	287 07	
Hamilton,	791 96	
Haverhill,	2,126 38	
Ipswich,	505 07	
Lawrence,	73 56	
Lynn,	248 64	
Merrimac,	655 72	
Methuen,	771 70	
Newbury,	885 76	
Newburyport,	169 01	
North Andover,	667 95	
Rockport,	121 48	
<i>Amounts carried forward,</i> . . .	\$14,346 96	\$68,439 10

REPAIR AND MAINTENANCE EXPENDITURES — *Continued.*

TOWN OR CITY.	Amount.	Totals.
<i>Amounts brought forward,</i> . . .	\$14,346 96	\$68,439 10
Rowley,	1,007 51	
Salem,	165 32	
Salisbury,	164 45	
Saugus,	714 25	
Swampscott,	171 09	
Wenham,	568 46	
West Newbury,	691 14	
		17,829 18
<i>Franklin County.</i>		
Ashfield,	\$120 38	
Bernardston,	217 71	
Buckland,	560 66	
Charlemont,	265 08	
Colrain,	209 90	
Deerfield,	1,119 58	
Erving,	838 77	
Greenfield,	343 12	
Montague,	2,519 22	
Northfield,	216 49	
Orange,	907 74	
Shelburne,	374 39	
Sunderland,	129 00	
Whately,	4,787 45	
		12,609 49
<i>Hampden County.</i>		
Agawam,	\$468 78	
Brimfield,	491 38	
Chester,	576 76	
Chicopee,	2,315 17	
East Longmeadow,	356 11	
Holyoke,	1,309 26	
Monson,	756 02	
Palmer,	4,816 14	
Russell,	2,973 77	
Wales,	57 15	
Westfield,	2,641 81	
West Springfield,	631 43	
Wilbraham,	6,925 85	
		24,319 63
<i>Hampshire County.</i>		
Amherst,	\$167 42	
Belchertown,	215 78	
Easthampton,	528 36	
Goshen,	54 69	
Granby,	197 34	
<i>Amounts carried forward,</i> . . .	\$1,163 59	\$123,197 40

REPAIR AND MAINTENANCE EXPENDITURES — *Continued.*

TOWN OR CITY.	Amount.	Totals.
<i>Amounts brought forward, . . .</i>	\$1,163 59	\$123,197 40
Hadley,	1,236 79	
Hatfield,	1,779 33	
Huntington,	666 35	
Northampton,	222 86	
Southampton,	81 45	
South Hadley,	1,337 92	
Ware,	785 65	
Williamsburg,	221 42	
		7,495 36
<i>Middlesex County.</i>		
Acton,	\$673 19	
Ashby,	2,726 83	
Ashland,	307 02	
Bedford,	395 24	
Billerica,	70 30	
Boxborough,	447 02	
Burlington,	670 43	
Chelmsford,	617 71	
Concord,	855 43	
Dracut,	56 58	
Framingham,	1,061 97	
Groton,	226 02	
Holliston,	306 96	
Hudson,	289 21	
Lexington,	461 60	
Lincoln,	349 11	
Littleton,	527 87	
Lowell,	656 51	
Marlborough,	1,646 37	
Medford,	31 62	
Melrose,	18 45	
Natick,	380 88	
Newton,	63 33	
North Reading,	305 04	
Reading,	508 07	
Pepperell,	155 22	
Somerville,	143 64	
Stoneham,	552 89	
Sudbury,	2,214 84	
Tewksbury,	333 85	
Townsend,	760 18	
Tyngsborough,	1,119 55	
Watertown,	136 99	
Wayland,	842 38	
Westford,	534 58	
<i>Amounts carried forward, . . .</i>	\$20,446 88	\$130,692 76

REPAIR AND MAINTENANCE EXPENDITURES — *Continued.*

TOWN OR CITY.	Amount.	Totals.
<i>Amounts brought forward,</i> . . .	\$20,446 88	\$130,692 76
Weston,	2,027 99	
Wilmington,	152 73	
Winchester,	612 59	
Woburn,	656 65	
		23,896 84
<i>Nantucket County.</i>		
Nantucket,	\$207 91	207 91
<i>Norfolk County.</i>		
Bellingham,	\$174 10	
Braintree,	219 77	
Canton,	409 26	
Cohasset,	155 82	
Dedham,	1 81	
Dover,	541 84	
Foxborough,	437 10	
Franklin,	341 34	
Holbrook,	134 75	
Milton,	102 42	
Needham,	233 23	
Norfolk,	559 74	
Norwood,	256 88	
Plainville,	54 80	
Quincy,	258 30	
Randolph,	146 09	
Sharon,	84 40	
Stoughton,	229 56	
Walpole,	1,276 49	
Wellesley,	270 87	
Westwood,	108 15	
Weymouth,	1,133 66	
Wrentham,	504 05	
		7,634 43
<i>Plymouth County.</i>		
Abington,	\$265 19	
Bridgewater,	560 81	
Brockton,	270 83	
Duxbury,	2,098 23	
Hanover,	219 31	
Hingham,	132 39	
Kingston,	232 23	
Lakeville,	510 49	
Marion,	752 91	
Marshfield,	2,569 38	
Mattapoisett,	419 56	
<i>Amounts carried forward,</i> . . .	\$8,031 33	\$162,431 94

REPAIR AND MAINTENANCE EXPENDITURES — *Continued.*

TOWN OR CITY.	Amount.	Totals.
<i>Amounts brought forward, . . .</i>	\$8,031 33	\$162,431 94
Middleborough,	838 30	
Pembroke,	70 44	
Plymouth,	1,168 02	
Rochester,	297 81	
Rockland,	259 73	
Scituate,	610 19	
Wareham,	1,297 92	
West Bridgewater,	327 44	
Whitman,	134 00	
<i>Suffolk County.</i>		13,035 18
Boston,	\$312 26	
Chelsea,	1,435 69	
Revere,	632 95	
<i>Worcester County.</i>		2,380 90
Athol,	\$2,743 00	
Auburn,	852 37	
Barre,	631 83	
Blackstone,	410 07	
Brookfield,	1,060 86	
Charlton,	267 34	
Douglas,	199 11	
Dudley,	363 40	
Fitchburg,	882 91	
Gardner,	713 15	
Grafton,	618 24	
Hardwick,	210 37	
Harvard,	139 45	
Holden,	1,056 98	
Lancaster,	170 03	
Leicester,	3,232 24	
Leominster,	320 15	
Lunenburg,	951 58	
Milford,	272 17	
Millbury,	495 11	
New Braintree,	62 71	
North Brookfield,	313 24	
Northborough,	856 14	
Oxford,	1,101 45	
Paxton,	840 89	
Phillipston,	2,132 88	
Princeton,	274 01	
Rutland,	30 68	
Shrewsbury,	1,662 15	
<i>Amounts carried forward, . . .</i>	\$22,864 51	\$177,848 02

REPAIR AND MAINTENANCE EXPENDITURES — *Concluded.*

TOWN OR CITY.	Amount.	Totals.
<i>Amounts brought forward,</i> . . .	\$22,864 51	\$177,848 02
Southborough,	831 32	
Southbridge,	163 47	
Spencer,	2,039 25	
Sterling,	560 98	
Sturbridge,	271 06	
Sutton,	316 78	
Templeton,	829 02	
Uxbridge,	274 56	
Warren,	833 29	
Webster,	146 38	
Westborough,	333 20	
West Boylston,	1,666 21	
West Brookfield,	670 83	
Westminster,	1,025 63	
Winchendon,	108 75	
Worcester,	2,692 59	
		35,627 83
Total, . . . . .	. . .	\$213,475 85

EXPENDITURES FOR REPAIRS OF STATE HIGHWAYS.

Motor Vehicle Fees Fund.

[Under Chapter 534, Acts of 1909.]

Abington,	\$50 40
Acton,	60 20
Adams,	1,504 45
Agawam,	464 16
Amesbury,	209 88
Andover,	42 57
Ashby,	1,525 85
Ashfield,	38 52
Ashland,	487 26
Athol,	2,801 43
Attleborough,	6,603 76
Auburn,	500 00
Barnstable,	617 44
Barre,	200 00
Becket,	477 73
<i>Amount carried forward,</i> . . .	\$15,583 65

<i>Amount brought forward,</i> . . .		\$15,583 65
Bedford,	3,457 24	
Belchertown,	12 67	
Bellingham,	1,309 71	
Berkley,	33 00	
Beverly,	1,360 89	
Billerica,	152 76	
Blackstone,	2,012 88	
Boston,	87 93	
Bourne,	1,220 60	
Boxborough,	44 76	
Braintree,	27 88	
Brewster,	92 55	
Bridgewater,	774 61	
Brimfield,	1,009 41	
Brockton,	273 66	
Brookfield,	561 80	
Buckland,	278 21	
Burlington,	193 59	
Canton,	518 77	
Charlton,	5 12	
Chatham,	95 91	
Chelmsford,	1,496 77	
Chelsea,	2,327 53	
Cheshire,	65 52	
Chester,	191 59	
Chicopee,	63 00	
Chilmark,	35 00	
Clarksburg,	10 46	
Cohasset,	1,050 21	
Colrain,	74 34	
Concord,	86 08	
Dartmouth,	8,833 55	
Deerfield,	318 11	
Dennis,	579 06	
Dighton,	1,303 29	
Douglas,	3,412 63	
Duxbury,	626 39	
Dover,	96	
Dedham,	1 93	
Dracut,	55	
Eastham,	10 02	

Amount carried forward, . . . \$49,594 59

<i>Amount brought forward,</i>	.	.	.	.	.	.	\$49,594 59
Easthampton,	.	.	.	.	.	.	328 75
Easton,	.	.	.	.	.	.	72 50
Edgartown,	.	.	.	.	.	.	230 02
Erving,	.	.	.	.	.	.	118 31
Essex,	.	.	.	.	.	.	360 29
Fairhaven,	.	.	.	.	.	.	2,542 07
Falmouth,	.	.	.	.	.	.	4,123 39
Fitchburg,	.	.	.	.	.	.	2,548 97
Foxborough,	.	.	.	.	.	.	76 17
Framingham,	.	.	.	.	.	.	4,122 76
Freetown,	.	.	.	.	.	.	173 57
Gardner,	.	.	.	.	.	.	274 97
Gloucester,	.	.	.	.	.	.	758 14
Goshen,	.	.	.	.	.	.	7 19
Grafton,	.	.	.	.	.	.	2,691 69
Great Barrington,	.	.	.	.	.	.	122 64
Greenfield,	.	.	.	.	.	.	58 43
Groton,	.	.	.	.	.	.	120 75
Groveland,	.	.	.	.	.	.	50 38
Hatfield,	.	.	.	.	.	.	822 90
Hamilton,	.	.	.	.	.	.	1 20
Hadley,	.	.	.	.	.	.	2,137 20
Hancock,	.	.	.	.	.	.	6,412 79
Hanover,	.	.	.	.	.	.	23 00
Harwich,	.	.	.	.	.	.	356 93
Haverhill,	.	.	.	.	.	.	560 45
Hingham,	.	.	.	.	.	.	721 62
Holbrook,	.	.	.	.	.	.	29 00
Holden,	.	.	.	.	.	.	172 80
Holliston,	.	.	.	.	.	.	1,580 62
Holyoke,	.	.	.	.	.	.	1,365 10
Hudson,	.	.	.	.	.	.	42 15
Huntington,	.	.	.	.	.	.	814 01
Ipswich,	.	.	.	.	.	.	3 03
Kingston,	.	.	.	.	.	.	631 29
Lakeville,	.	.	.	.	.	.	42 34
Lancaster,	.	.	.	.	.	.	43 95
Lawrence,	.	.	.	.	.	.	6 98
Lee,	.	.	.	.	.	.	793 75
Leicester,	.	.	.	.	.	.	966 40
Lenox,	.	.	.	.	.	.	2,254 03
<i>Amount carried forward,</i>	.	.	.	.	.	.	\$88,157 12

<i>Amount brought forward, . . .</i>	\$88,157 12
Leominster,	42 10
Lexington,	2,957 02
Lincoln,	14 99
Littleton,	193 40
Lowell,	884 90
Lynn,	810 39
Lunenburg,	402 29
Mansfield,	16 21
Marion,	2,158 71
Marlborough,	358 03
Marshfield,	1,162 25
Mattapoissett,	947 06
Methuen,	507 06
Merrimac,	949 52
Middleborough,	7,487 07
Milford,	4,935 17
Millbury,	2,955 04
Milton,	98 07
Monson,	35 88
Montague,	4,719 92
Medford,	668 78
Melrose,	4 69
Nantucket,	1,008 25
Natick,	3,535 27
Needham,	1 71
Newbury,	371 44
Newburyport,	9 24
Norfolk,	330 37
North Adams,	6,640 27
Northampton,	40 00
North Andover,	447 61
North Attleborough,	589 92
Northborough,	504 82
North Brookfield,	34 25
North Reading,	53 05
Norton,	6 20
Norwood,	311 42
Newton,	1 21
Oak Bluffs,	244 59
Orleans,	281 49
Oxford,	90 57
<i>Amount carried forward, . . .</i>	\$134,967 35

Amount brought forward, \$242,086 71

Miscellaneous:—

Analysis of tar and oil,	\$1,958 52
Rent for winter storage and repair shops,	1,200 00
Electric service at repair shops,	32 33
Storage, repairs, supplies, care, etc., on commis-	
sion's automobile,	1,430 43
12 water sprinklers,	2,882 00
4 street sweepers,	980 00
1 hot oil distributor,	820 00
7 tar kettles,	575 00
1 lathe,	560 00
2 steel oil tanks,	500 00
4 steam pumps,	296 00
2 twentieth century graders,	291 18
1 gasoline engine,	200 00
3 diaphragm pumps,	236 25
1 electric motor,	177 00
1 gasoline pump,	130 86
2 tool boxes,	148 00
7 tents,	141 50
1 truck,	65 00
1 tank for oil wagon,	55 00
1 scarifier,	59 28
1 scale,	58 64
2 road drags,	50 00
1 gasoline heater and burner,	48 00
2 asphalt burners,	40 00
1 harrow,	25 25
1 portable forge,	21 00
1 gravel screen,	6 50
Levelers,	73 89
Supplies, tools and minor apparatus,	2,256 56
Parts and fittings for machinery,	1,819 45
Road roller repairs,	438 23
Repairing steam sprayer,	41 97
Repairs on motor cycles,	181 22
Repairing crusher bins,	61 26
Repairing concrete mixer,	16 50
Road roller supplies and parts,	133 00
Labor and materials,	5,292 74
Rebuilding 2 oil and tar sprayers,	377 23
Building 2 portable houses,	200 00

Amounts carried forward, \$23,879 79 \$242,086 71

<i>Amounts brought forward,</i> . . .	\$23,879 79	\$242,086 71
Transportation of machinery,	654 91	
Refilling sweeper brooms,	178 14	
Labor on oil tanks,	175 10	
Mounting tank wagons, and labor and repairs		
to spraying machine,	141 36	
8 spray nozzles for tank wagons,	50 40	
Repairing tar kettles,	48 50	
Painting tool wagons,	40 00	
Warning signs,	19 80	
Boiler inspection,	5 00	
	<hr/>	25,193 00
Cost of engineering,		49,323 06

Repair and maintenance of town and county
ways (chapter 525, Acts of 1910):—

Amherst,	\$4,818 27
Barre,	452 98
Becket-Lee,	615 99
Cummington,	2,564 25
Danvers,	1,100 00
Deerfield,	21 38
East Longmeadow,	1,548 73
Egremont,	1,597 59
Goshen,	1,263 63
Greenfield,	1,272 94
Hampden,	500 00
Hinsdale,	1,447 64
Ipswich,	500 00
Lee-Becket,	936 27
Lynnfield,	1,600 00
Maynard,	1,327 63
Montague,	32 40
New Ashford,	985 04
Newbury,	4,450 00
Northborough,	1,303 30
Peabody,	500 00
Rowley,	500 00
Saugus,	1,724 71
Shelburne,	3,159 81
Sheffield,	331 20
Southampton,	27 54
Topsfield,	2,376 25

<i>Amounts carried forward,</i> . . .	\$36,957 55	\$316,602.77
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<i>Amounts brought forward,</i> . . .	\$36,957 55	\$316,602 77
Truro,	5,199 29	
Warren,	327 20	
Wellfleet,	1,334 55	
Wilbraham,	159 98	
Williamsburg,	1,535 00	
Wilmington,	347 38	
Winchendon,	1,500 00	
Windsor,	2,882 50	
	<hr/>	50,243 45
		<hr/>
		\$366,846 22

GENERAL EXPENSES, DEC. 1, 1910, TO NOV. 30, 1911.

[Under Chapter 555, Acts of 1911.]

Salaries of commissioners,	\$8,208 33
Travel of commissioners,	3,110 86
Salaries of clerical assistants and first and second engineers,	18,708 77
Rent of offices,	4,750 00
Printing and binding annual report,	1,019 09
Printing,	1,500 52
Office and typewriter supplies,	773 49
Telephone including tolls,	806 93
Postage, including postal cards and envelopes,	1,061 16
Recording land takings and easements,	166 03
Advertising hearings,	68 06
Travel and expense of chief engineer,	212 12
Rental and repair of typewriters,	55 85
Repairs to steam road rollers,	6,499 38
Miscellaneous items, including express charges, car fares, telegrams and other minor office expenses,	602 95
	<hr/>
	\$47,543 55

MOTOR VEHICLE FEES FUND.

[Under Chapter 534, Acts of 1909.]

Automobile Department.

Salaries of clerks and clerical assistants,	\$38,144 08
Rent of offices,	2,290 50
Number plates, motor cycle seals and speed signs,	10,716 82
Printing,	4,488 09
	<hr/>
<i>Amount carried forward,</i>	\$55,639 49

<i>Amount brought forward,</i>	\$55,639 49
Postage, including postal cards and envelopes,	4,979 81
Typewriters purchased and rented,	440 00
Office and typewriter supplies,	1,425 22
Adding machine,	300 00
Miscellaneous items, including express charges, car fares, telegrams and other minor office expenses,	928 12
	<hr/>
	\$63,712 64

Expenses of Examiners and Investigators.

Salaries of inspectors and examiners,	\$10,488 33
Salaries of clerk and stenographers,	2,668 00
Traveling expenses,	2,785 80
Printing,	222 88
Rent,	512 50
Typewriter,	72 03
Postage, including stamped envelopes,	323 28
Miscellaneous items,	228 64
	<hr/>
	\$17,301 46
Rebates of automobile fees,	3,826 50

EXPENSES CONNECTED WITH TELEPHONE AND TELEGRAPH SUPERVISION.

[Under Chapter 555, Acts of 1911.]

Salaries of commissioners,	\$4,375 00
Salaries of clerical assistants,	2,478 14
Printing,	1,339 31
Miscellaneous items,	28 43
	<hr/>
	\$8,220 88

[Under Chapter 632, Acts of 1908, and Chapter 78, Resolves of 1909.]

Expenses in connection with an inventory and appraisal of the property of the New England Telephone and Telegraph Company,	\$12,357 67
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MISCELLANEOUS EXPENDITURES.

[Under Chapter 578, Acts of 1910.]

Expenditures for the construction of a breakwater or causeway in the town of Marblehead,	\$21,076 99
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[Under Chapter 574, Acts of 1910.]

Expenditures for the construction of a bridge over the Westfield River in the town of Chester,	\$7,668 73
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[Under Chapter 677, Acts of 1911.]

Expenditures for the construction of a highway over
Hoosac Mountain, between North Adams and the val-
ley of the Deerfield River, \$1,777 67

[Under Chapter 746, Acts of 1911.]

Expenditures for the construction of a highway from
the New Hampshire line to Broadway in the town of
Salisbury, \$262 43

[Under Chapter 678, Acts of 1911.]

Expenditures for the construction of a highway between
Shelburne Falls and Green River bridge in the town
of Greenfield, \$283 77

[Under Chapters 416-744, Acts of 1911.]

Expenditures for the improvement of Beach Point Road
in the town of Truro, \$205 80

SUMMARY OF EXPENDITURES.

✓ For construction,	\$404,874 34
✓ For construction under "small town" acts,	80,784 89
For road repair and maintenance, from revenue,	✓ 213,475 85
For road repair and maintenance (motor vehicle fees fund),	366,846 22
For general expense under chapter 555, Acts of 1911,	47,543 55
For expenditures connected with automobile registration,	63,712 64
For expense of examiners and investigators,	17,301 46
For rebates of automobile fees, under chapter 534, Acts of 1909,	3,826 50
For telephone and telegraph supervision, under chapter 555, Acts of 1911,	8,220 88
For expenditures under chapter 632, Acts of 1908, and chapter 78, Resolves of 1909,	12,357 67
For expenditures under chapter 578, Resolves of 1910,	21,076 99
For expenditures under chapter 574, Acts of 1910,	7,668 73
✓ For expenditures under chapter 677, Acts of 1911,	1,777 67
✓ For expenditures under chapter 746, Acts of 1911,	262 43
✓ For expenditures under chapter 678, Acts of 1911,	283 77
For expenditures under chapter 416, Acts of 1911,	✓ 205 80
	<hr/>
	\$1,250,219 39

WM. D. SOHIER,

F. D. KEMP,

Massachusetts Highway Commission.

APPENDIX A.

REPORT OF CHIEF ENGINEER.

To the Massachusetts Highway Commission.

GENTLEMEN:— I respectfully submit the following report concerning the work done by the engineering department during the year ending Nov. 30, 1911.

SURVEYS, ESTIMATES AND DESIGNS.

During the year preliminary surveys and estimates were made on contemplated State highways in 25 towns, covering an aggregate distance of 28.43 miles. Lines and grades for construction work on State highways have been made in 44 towns, covering an aggregate distance of 53.59 miles, some of this work having been done on roads upon which construction was commenced in 1910. Final surveys and measurements were made on contemplated State highways in 34 towns, covering an aggregate distance of 44.93 miles. On "small town" work, so called, preliminary surveys, including plans and profiles, were made in 77 towns, covering an aggregate distance of 47.60 miles. In addition to the above, surveys have been made in 12 towns of roads to be constructed by towns, covering an aggregate distance of 8.43 miles.

In connection with the above work, plans, profiles and cross-sections of State roads have been prepared, covering an aggregate of 28.51 miles, distributed in 25 towns. Layout plans have been made of roads in 37 towns, covering an aggregate distance of 41.96 miles. Plans to accompany decrees for street railway locations on State highways have been made in 18 towns.

BRIDGES.

The following is a list of bridges built during the year:—

Agawam, over Worthington Brook, a reinforced concrete beam bridge, facing the old masonry abutments with concrete, span of 18 feet.

Bernardston, over Dry Brook, a reinforced concrete beam bridge, span of 12 feet.

North Andover, over Cochichewick Brook, a reinforced concrete beam bridge, span of 18 feet.

Shrewsbury, over Poor Farm Brook, a reinforced slab-floor bridge, span of 10 feet.

Spencer, over Seven Mile River, a reinforced concrete arch bridge, span of 42 feet.

Townsend, over Pearl Hill Brook, a reinforced concrete beam bridge, span of 20 feet.

Walpole, over the Neponset River, a reinforced concrete beam bridge, span of 21 feet.

Designs and estimates have also been made for contemplated bridges, or bridges to be built by towns, as follows:—

Erving, over Keyup Brook, a reinforced concrete beam bridge, span of 17½ feet.

Framingham, a design for the town, for facing old abutments, building new wings and rebuilding the approaches to the bridge over Sudbury River, on Fenwick Street.

Greenfield, over Mountain Brook, a reinforced concrete slab-floor bridge, span of 18 feet.

Harwich, a design for the town, a bridge over Herring River, concrete beam bridge with two spans of 25 feet each.

West Brookfield, over Quaboag River, a reinforced concrete beam bridge, two spans of 33 feet each.

In addition to the above, a bridge has been built over the Charles River, at the Medway-Franklin line, by the Norfolk county commissioners. The design for this bridge was made in this office. The work consisted of removing an old stone arch which was in an unsafe condition, and replacing it with a concrete arch with spandrel walls and parapets, the old wing walls being rebuilt at the junction with the new work; also one section of the old wall about 30 feet in length was rebuilt.

STATE HIGHWAYS.

Construction has been completed of 9 miles on contracts that were pending at the beginning of the year, and construction has also been completed of 31.37 miles of roads on which work was commenced during the present year, making a total of 40.37 miles of construction completed during the year.

Construction has been commenced but not completed on 22.9 miles of roads on layouts of this year in 22 towns.

Of the above roads completed this year, 7.77 miles were of water-bound macadam; 5.37 miles were of gravel; 4.57 miles were of sand bound with oil; 4.07 miles were of bituminous macadam, that is, macadam with bituminous binder incorporated in the top course by penetration method; 14.61 miles were of water-bound macadam with an oil surface applied; 3.98 miles were of gravel with the top surface bound with bituminous binder.

Accompanying this report is a table showing costs of construction of State highways separated, in order that comparisons may be made between the costs of different classes of work in different portions of the State.

“SMALL TOWN” WORK.

Under the provisions of the “small town” act, 45.9 miles of road were constructed during the year in 80 towns, and contracts were made but not completed for 8 miles in 17 towns. The lengths, types and costs of these roads are shown in tabular form in this report.

MAINTENANCE OF STATE HIGHWAYS.

Bituminous material has been used in the maintenance of State highways during the present year on 240.48 miles, and there are at present 545.47 miles of State highway on which bituminous material has been used either in construction or maintenance. While there have been a few failures of bituminous roads, the use of bituminous material seems at the present time to be the only feasible way of preserving the roads under the present traffic, and I recommend continuing the use of this material in construction and maintenance so far as funds will permit.

PERMITS.

Seven hundred and thirty-four permits have been issued during the year for occupying or opening State highways for various purposes. In a few cases, the expense of inspecting the work done under permits has been paid by the parties to whom permits were issued. This has been done, however, only in such cases as seemed to require constant supervision for several days or weeks.

ADVICE TO TOWNS.

During the year your engineers have given engineering advice to officials in 94 towns and counties. The scope of the work for which advice has been given has varied greatly, and the cost of the

work carried out in accordance with advice, although a large sum, cannot be definitely determined, as we have no access to the accounts which show the cost of the work done.

SPECIAL ACTS OF THE LEGISLATURE.

Work has been completed during the year on the Marblehead breakwater and highway as authorized by chapter 578, Acts of 1910, and on the bridge in Chester, authorized by chapter 574, Acts of 1910. Work is under way in Greenfield and Shelburne, as authorized by chapter 678, Acts of 1911, and surveys have been made preparatory to letting contract for work in Windsor, as authorized by chapter 711, Acts of 1911. Under chapter 677, Acts of 1911, extensive surveys have been made between the North Adams line and Charlemont. While the plotting of the notes of these surveys and estimates of the cost of the work have not yet been completed, sufficient work has been done to justify the statement that the funds appropriated are not adequate to construct or improve any great portion of the road between the above-mentioned points. Notes and estimates will be sufficiently completed in January, 1912, to make a comprehensive report. The result of the surveys shows that it would not be economical or advisable to follow the existing highway over the mountains, as it is impossible to reduce the grade to any reasonable percentage. It appears that the best route obtainable would not follow the existing highway between Charlemont and North Adams, except over a small part of the route. With this last route, a maximum grade of 7 per cent. can be obtained without extreme expense, whereas the grade of the present highway over the mountains in several places exceeds 15 per cent.

Under authority of chapter 476, Acts of 1911, surveys and estimates have been made for a road in Salisbury. It has been found that an ordinary gravel road of the usual State highway width could be built within the appropriation, but the releases of land owners not having been obtained, nothing has been done on the road.

Respectfully submitted,

A. W. DEAN,
Chief Engineer.

Table showing Costs of Grading and Drainage, separated from Surface Costs on Roads completed in 1911.

TOWN.	Type of Surface.	LENGTH OF CALCULATIONS.		COST PER MILE.		COST OF SURFACE.	
		Miles.	Square Yards.	Bridges and Culverts.	Grading and Foundation.	Per Mile.	Per Square Yard.
Agawam,	Macadam, 4½-inch, trap rock, bituminous surface coat (concrete beam bridge).	.893	7,858	\$2,005	\$1,186	\$7,689	\$9.874
Ashby-Townsend, 1910,	Macadam, 5-inch, local stone (concrete beam bridge),	1.034	9,067	2,955	3,028	4,141	.471
Barnstable,	Macadam, 4-inch, local stone,	1.22	10,733	89	591	3,803	.432
Barnardston,	Gravel, 6-inch (concrete beam bridge),	2.702	23,778	686	2,255	590	.067
Bourne,	Macadam, 4-inch, trap rock,	1.087	9,565	602	1,549	5,540	.629
Charlton, 1910,	Macadam, 4-inch, local stone,	1.229	10,815	920	3,736	2,770	.315
Charlton, 1911,	Macadam, 4-inch, local stone,	1.066	9,378	441	3,342	3,142	.357
Chester, 1910,	Grading and concrete arch bridge, . . . . .	.277	2,437	61,441	10,157	-	-
Chester, 1911,	Macadam, 4½-inch, trap rock, bituminous surface coat (concrete beam bridge).	1.511	13,298	2,290	1,953	5,555	.642
Chilmark,	Macadam, 4-inch, local stone, 12 feet wide,	1.129	7,947	21	619	3,789	.539
Deerfield, 1910,	Gravel, 5-inch,	1.224	10,776	1,326	3,701	1,046	.119
Dighton, 1910,	Macadam, 5-inch, local stone,	1.08	9,507	679	3,633	4,005	.455
Eastham, 1909,	Sand and oil, 4-inch, built up,	3.079	27,095	48	401	2,332	.322
Erving, 1910,	Macadam, 5-inch, local stone,	1.939	17,063	1,490	3,683	2,441	.277
Franklin, 1910,	Gravel, 5-inch, bituminous surface coat,	1.203	10,583	902	914	2,789	.317
Granby,	Macadam, 5-inch, local stone,	1.503	13,223	283	1,755	4,053	.460
Hatfield, 1910,	Macadam, 5-inch, trap rock (concrete beam bridge), . . . . .	.633	5,570	8,357	7,408	5,994	.681

Harvard, 1910,	.	.	.	.	.	.	.	.	.	.	.	.730	6,446	886	8,457	1,454	.168
Holliston, 1910,	.	.	.	.	.	.	.	.	.	.	.	1.356	16,333	527	2,160	3,130	.356
Ipswich, .	.	.	.	.	.	.	.	.	.	.	.	.921	8,107	990	1,121	4,063	.461
Lakeville, 1910,	.	.	.	.	.	.	.	.	.	.	.	1.937	17,042	450	2,458	4,557	.517
Lanesborough,	.	.	.	.	.	.	.	.	.	.	.	1.718	15,117	519	3,034	4,062	.461
Milford, 1910, .	.	.	.	.	.	.	.	.	.	.	.	1.178	10,363	979	4,111	4,947	.562
Pepperell, .	.	.	.	.	.	.	.	.	.	.	.	1.172	10,315	745	1,711	1,026	.116
Plainville, .	.	.	.	.	.	.	.	.	.	.	.	.487	4,283	544	3,348	6,490	.738
Rockport, 1910,	.	.	.	.	.	.	.	.	.	.	.	.663	5,833	275	2,305	4,984	.565
Sandwich, 1910,	.	.	.	.	.	.	.	.	.	.	.	1.487	13,083	132	1,355	3,837	.436
Seekonk, 1910,	.	.	.	.	.	.	.	.	.	.	.	1.50	13,200	216	400	3,087	.351
Somerset, 1910,	.	.	.	.	.	.	.	.	.	.	.	.871	7,666	289	1,532	4,306	.489
Townsend, .	.	.	.	.	.	.	.	.	.	.	.	.066	583	33,356	12,272	6,873	.778
Tyngsborough,	.	.	.	.	.	.	.	.	.	.	.	.805	7,083	707	2,436	7,169	.815
Wilmington, 1910,	.	.	.	.	.	.	.	.	.	.	.	1.095	9,634	417	1,527	7,685	.874
Wilmington, 1911,	.	.	.	.	.	.	.	.	.	.	.	1.409	12,403	288	1,746	6,128	.696

APPENDIX B.

RELATING TO THE WORK OF THE AUTOMOBILE DEPARTMENT.

Statement showing the Number of Registration Certificates and Licenses to operate issued during the Fiscal Year 1911, also the Fees received for the same, together with the Fees for Examinations, for Copies of Certificates of Registration and Licenses, etc., and Fines for Violation of the Automobile Law.

Certificates of registration:—

Automobiles,	38,907	\$380,760 00
Motor cycles,	3,658	7,030 00
Manufacturers and dealers,	870	24,849 00

Licenses to operate:—

Operators,	11,061 at \$2 00	22,122 00
Chauffeurs,	4,183 at 2 00	8,366 00
Operators' renewals,	25,345 at 50	12,672 50
Chauffeurs' renewals,	11,361 at 50	5,680 50

Examinations,	6,137 at 2 00	12,274 00
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Copies of certificates and licenses

furnished,	1,602 at 50	801 00
Number plates and seals,		813 25
Miscellaneous receipts, including interest on deposits,		2,049 70

Amount received at the office of the commission,	\$477,417 95
Court fines received by the Treasurer and Receiver-General,	26,744 50

Total receipts for the year, \$504,162 45

REPORT OF THE EXAMINING AND INVESTIGATING DEPARTMENT.

F. I. BIELER, *Secretary, Massachusetts Highway Commission.*

DEAR SIR:—I beg to submit the following as the fifth annual report of the examining and investigating department, covering the period from Dec. 1, 1910, to Dec. 1, 1911. Statistical tables containing the data of this department are handed you herewith.

Examinations.

Examinations of applicants for chauffeurs' licenses have been conducted, as in previous years, in 9 cities of the Commonwealth besides Boston, and by request a few examinations were conducted in the city of Lawrence and town of Oak Bluffs.

In comparison with the statistics of last year, the following special features may be noted:—

	1910.	1911.
Total number examinations,	5,433	6,152
Total number persons examined,	4,138	4,648
Total number persons passed,	3,701	4,119
Total number failures on first examination,	1,268	1,424
Total number failures on road examination,	1,263	1,496
Total number persons failed to receive license,	437	529
Total per cent. failed to receive license,	10.56	11.38
Total per cent. failures on first examination,	31.50	31.53
Total per cent. failed on written test, first examination,	8.60	8.63
Total per cent. failed on road test, first examination,	22.90	25.11

From these statistics it will be seen that 510 more persons have been examined, and 719 more examinations have been held, this year than last. The percentage of failures on the written examination has remained about the same, while the percentage of failures on the road test has increased. Four hundred and eighteen more persons passed the examination this year than last, and 92 more finally failed to receive a license. This year 11.38 per cent. finally failed, as against 10.56 per cent. for 1910. There were 1,496 failures in the road test, an increase of 233. More than half of the total number of examinations, or 3,125, were conducted in Boston. The balance, or 3,027, were conducted in the other cities.

From the expenditures apportioned to examinations it has been found that the average cost of each examination is \$1.10.

Investigations and Prosecutions.

A comparison of cases investigated and prosecuted in 1910 and 1911 is given below:—

	1910.	1911.
Cases investigated,	429	504
Prosecutions,	47	39

The department has investigated 114 deaths. Of these, 110 occurred in Massachusetts, 2 in Connecticut and 2 in Maine. These last cases were investigated for the reason that the operators were residents of this State and held Massachusetts licenses. Of the 110 deaths in Massachusetts, 1 (a case of asphyxiation by gasoline fumes) may be regarded as having been only indirectly connected with the operation of an automobile.

On July 17, 1911, Thomas A. Dolan of Fall River, Mass., was appointed inspector and examiner. Mr. A. F. Foote has investigated and examined in the western part of the State, Mr. E. L. Blish in the central district, and Messrs. P. H. Weinert, William MacConnell, C. G. Hubbell and Thomas A. Dolan in the eastern and southern districts.

In addition to investigating accidents, the inspectors have given a great deal of time to investigating complaints, and to reporting on the general reputation of applicants for licenses who have had their licenses suspended or revoked. Owing to the increase in the number of applicants for licenses, the work of the inspectors has been greatly interrupted by their being called upon to conduct examinations. Many accident cases that seemed to be serious have been placed on file, since it was impossible for the present force of inspectors to investigate them all.

More than 2,825 newspaper clippings have been received which refer to court proceedings and automobile accidents. A daily record has been kept showing all automobile accidents and collisions in a carefully analyzed tabulation. Besides the daily record, a monthly compilation is also made.

A comparison of the figures for the year 1910 with those of 1911 is given below:—

Deaths, Injuries, Accidents.

	1910.	1911.
Total number killed,	77	110
Total number injured,	963	1,248
Total number accidents,	1,182	1,531
Total number accidents in daytime,	867	1,098
Total number accidents after dark,	315	433
Total number accidents on country roads,	222	280
Total number accidents on city or town streets,	960	1,251

It will be seen from the above table that there has been a large increase under each heading.

The average cost per investigation has been \$20.90.

Court Abstracts.

During the year 1911, 3,322 abstracts were received, as against 3,706 received in 1910. These abstracts of court records have come from 68 courts in this Commonwealth. In order to obtain these abstracts promptly, it has been necessary in many cases to communicate with the clerks of court. The number of inquiries for information contained in these abstracts has been approximately the same this year as last.

Analysis of the Abstracts of Court Records for the Period from Dec. 1, 1910, to Dec. 1, 1911.

Number of courts that have forwarded abstracts,	68
Total number of abstracts received,	3,322
Persons guilty of unlawful automobiling,	2,911
Persons not guilty of unlawful automobiling,	104
Cases appealed to a higher court,	305
Complaints placed on file,	572
Complaints <i>not pressed</i> ,	102
Defendants defaulted,	18
Persons committed to imprisonment,	8
Complaints brought:—	
For manslaughter,	2
For overspeeding,	910
For reckless operating,	94
For operating while intoxicated,	25
For using automobile without authority,	41
For endangering lives and safety of public,	12
For failing to stop after causing injury,	18
For improper display or no register number,	51
For operating without a license,	217
For operating without carrying registration certificate,	57
For operating an unregistered motor vehicle,	53
For refusing to stop when signalled by officer,	61
For operating with unlighted lamps,	183
For violations of park rules,	270
For failing to give signal when approaching intersecting way,	1,165
For miscellaneous offences,	203

Fines, etc., as shown by court abstracts:—

For violating State statutes,	\$26,537 00
For violating metropolitan park rules,	2,182 00
For cost of court,	2,245 38
	<hr/>
Total,	\$30,964 38

Respectfully submitted,

F. L. AUSTIN,

Chief Examiner and Inspector.

APPENDIX C.

REPORT OF FORESTER OF HIGHWAY COMMISSION.

CLINTON, Dec. 1, 1911.

To the Massachusetts Highway Commission.

GENTLEMEN: — I hereby present my eighth annual report of the work done in the forester's department.

The year has been an unusual one, erratic in the extreme, with intense heat and a minimum amount of precipitation at the time when moisture was most needed; yet despite these facts our trees have survived the test remarkably well.

During the spring it was necessary to water some of the trees, at which time we added from one to two ounces of nitrate of soda to each of the backward trees, with very beneficial results. Continuous use of nitrate of soda would not be desirable. A more complete fertilizer composed of 6 parts basic slag, 3 parts sulphate of potash, low grade, and 1 part nitrate of soda is a formula very satisfactorily used for trees.

In May, mostly in Palmer and adjacent towns, 1,381 new trees were planted, to complete our tree work from Worcester to Springfield. Fortunately the preparation of the ground was done last fall; consequently, it contained the greatest amount of moisture possible, which, with the thorough mixture of dressing and crushed stone dust, produced ideal conditions.

The method of reducing the number of caretakers, giving a greater number of trees to one man, was a success, the condition of the trees being greatly improved.

The percentage of replaced trees has been smaller than any year since the inception of the tree planting, namely, 3 per cent. It is doubtful if trees, subjected to as many trying conditions as those by the roadside encounter, can be maintained at a much less loss.

The condition of the trees at the nursery is favorable; the stock, however, at the present time consists largely of young trees, 1,400 having been added by propagation during the year.

Very satisfactory experiments have been made by the forester with the use of dynamite in preparing the ground for tree planting. By using one-third of a stick of dynamite and inserting it in the ground to a depth of 18 inches the soil is thoroughly shaken up,

and fertilizing elements in the soil are rendered available to a greater depth than ordinarily. All insect life is thereby destroyed. This will prove desirable in soils having a rocky or clayey subsoil and reduce the cost of preparation.

Your forester has been called upon to prepare a lengthy article upon the planting and care of shade trees along the highways, as practiced by this commission, for "Engineering and Contracting," published in Chicago. This article has recently been copied by the "Surveyor," published in London.

The work of spraying trees in towns west of Worcester was placed in charge of the forester this year. As a result, work was done in 30 towns and cities, chiefly for the elm-leaf beetle, which is now prevalent throughout the State. While it was not all that could be desired in every case, there was a marked contrast in the favorable appearance of the trees compared with the trees on adjacent roads not sprayed. Everything depends on an early application and a pure quality of arsenate of lead.

The *Vanessa antiopa*, or mourning cloak, was more prevalent than usual, but it is not so serious a pest and rarely defoliates an entire tree.

Preparations have been made to use hedges in place of guard rails where conditions will allow. In the spring 5,000 young plants were procured and planted in the nursery, ready to set out next spring. The varieties selected were aralias, lilacs, Japanese roses, native barberries and Chinese privet; to these might be added the California privet for positions where the subsoil is thoroughly drained, the object being to have a type of plant that will produce a thick growth.

New trees planted in 1911,	1,381
Total trees planted in eight years,	15,217
Trees replaced in 1911,	418
Percentage of loss,	3
Large trees on hand in nursery,	561
Small trees on hand in nursery,	4,956
Total number of towns in which trees have been planted,	63
Number of towns in which trees have been inspected in 1911,	144
The cost of maintenance per tree was	\$0 25
The cost of new planting per tree was	\$1 11

Respectfully submitted,

E. W. BREED,
Forester.

VARIETIES AND DISTRIBUTION OF SHADE TREES PLANTED IN 1911.

Trees replaced.

TOWN.	Elms.	Norway Maples.	Sugar Maples.	White Maples.	Ash-leaf Maples.	Ash.	Willows.	Miscellaneous.	Totals.
Agawam,	-	-	12	3	-	-	2	-	17
Andover,	-	-	4	1	-	3	2	-	10
Ashby,	-	-	10	-	-	-	-	-	10
Auburn,	2	-	6	10	3	-	1	-	22
Barnstable,	2	-	-	-	-	-	-	-	2
Brewster,	11	-	-	-	-	8	10	-	29
Brookfield,	-	4	-	1	-	-	-	-	5
Chatham,	12	-	-	-	2	1	-	1	16
Chelmsford,	-	-	-	-	-	7	-	-	7
Cheshire,	4	-	-	-	-	-	-	-	4
Dennis,	7	1	-	-	1	1	-	-	10
Easthampton,	-	4	10	-	-	-	1	-	15
Fitchburg,	1	-	3	-	-	-	-	-	4
Gardner,	7	-	-	-	-	-	1	-	8
Hadley,	-	11	-	-	-	-	-	-	11
Hancock,	-	5	-	-	-	-	-	-	5
Hatfield,	-	-	6	-	-	-	-	-	6
Hinsdale,	2	-	-	-	-	-	3	-	5
Huntington,	-	-	1	-	-	7	-	-	8
Lee,	-	1	-	-	-	-	4	-	5
Leicester,	-	-	4	-	-	-	-	-	4
Lenox,	-	8	-	1	-	-	-	-	9
Lowell,	-	-	2	-	-	2	4	-	8
Montague,	2	-	-	-	-	5	-	-	7
Natick,	2	3	1	-	-	6	-	-	12
North Adams,	6	4	-	-	-	3	1	-	14
Norfolk,	2	4	-	-	-	1	-	-	7
Northampton,	1	-	1	-	-	-	1	-	3
North Reading,	4	-	-	-	-	4	-	-	8
Norwood,	4	-	2	-	-	-	-	-	6
Orange,	1	4	-	-	-	2	-	-	7
Pittsfield,	-	9	-	-	-	-	-	-	9
Reading,	2	-	4	-	-	3	2	-	11
Richmond,	-	9	-	-	-	-	1	-	10

VARIETIES AND DISTRIBUTION OF SHADE TREES PLANTED IN 1911 —
Concluded.

Trees replaced.

TOWN.	Elms.	Norway Maples.	Sugar Maples.	White Maples.	Ash-leaf Maples.	Ash.	Willows.	Miscellaneous.	Totals.
Spencer,	-	-	4	-	-	-	-	2	6
Stoneham,	1	8	4	-	-	1	-	-	14
Stockbridge,	-	1	-	-	-	-	1	-	2
Templeton,	-	1	-	-	-	-	2	-	3
Townsend,	-	-	1	-	-	10	-	-	11
Tyngsborough,	-	-	-	-	-	13	-	6	19
Walpole,	2	1	-	-	-	2	-	-	5
Warren,	1	-	-	-	-	1	-	-	2
Wellesley,	-	-	-	-	-	2	-	-	2
West Brookfield,	-	-	-	-	-	1	1	-	2
Westfield,	3	-	9	8	-	-	-	-	20
Westminster,	2	2	4	-	-	-	-	-	8
Wrentham,	-	2	-	-	-	-	-	-	2
Yarmouth,	-	-	-	-	3	5	-	-	8
Totals,	81	82	88	24	9	88	37	9	418

New Trees planted.

TOWN.	Norway Maples.	Sugar Maples.	White Ash.	Russian Willows.	Laurel-leaf Willows.	Totals.
Brookfield,	16	25	-	-	-	41
Monson,	-	-	43	-	-	43
Palmer,	100	254	511	90	-	955
Somerset,	-	-	25	-	-	25
Spencer,	4	-	83	-	9	96
Wilbraham,	-	61	132	28	-	221
	120	340	794	118	9	1,381

On Hand in Nursery.

Large Trees. — American elms, 93; white maples, 66; English ash, 39; Lombardy poplars, 18; Russian willows, 60; black locusts, 25; Norway maples, 46; lindens, 22; white poplars, 17; laurel-leaf willows, 100; assorted willows, 50; miscellaneous, 25; total, 561.

Small Trees. — American elms, 838; ash-leaf maples, 316; white ash, 1,542; red oaks, 323; Russian willows, 520; lindens, 50; white maples, 191; green ash, 1,052; scarlet oaks, 63; pine oaks, 50; laurel-leaf willows, 11; total, 4,956.

APPENDIX D.

REPORT OF MR. F. W. RANE, STATE FORESTER, RELATING TO
SUPPRESSION OF INSECT PESTS.

BOSTON, MASS., Dec. 19, 1911.

Massachusetts Highway Commission, 15 Ashburton Place, Boston, Mass.

GENTLEMEN:— I submit, herewith, a brief report on the work done against the gypsy and brown-tail moths and elm-leaf beetle on State highways under the direction of this department during the past fiscal year. The work has been carried on by this department as in previous years, and has been given our best attention. We have not only endeavored to attend to the gypsy and brown-tail moth work on highways, but have done considerable work in the moth-infested section against the elm-leaf beetle. The condition of the State highways at this time is very much improved as far as the gypsy and brown-tail moths are concerned, and is not at all serious.

A general infestation of the elm-leaf beetle occurs throughout the district on the highways, and in many places it is very serious, and necessitates very careful spraying during the summer season.

During the past year the amount expended by this department was somewhat increased over the year previous, owing to the fact that the government, in the year 1910, took care of several miles of State highway, which this department was obliged to care for the past year. The necessary thinning in nearly all of the moth-infested district on the highways has been completed, and in some sections considerable spraying was done by this department, especially in the Cape district, where work was done in more towns in a much more thorough manner at somewhat less cost than the previous year.

I am inclosing a comparison of the two years' expenditure on the same work in the Cape towns.

Much might be done in the way of removing dead wood on the State highways, which would facilitate the insect problem to a great extent, as a large part of it could be attended to in the coming

season. There are also several dead trees, which it will be necessary to remove, and this matter will be attended to by this department. Not much of the winter work has been accomplished at this time, owing to the fact that last year's appropriations were exhausted early in the season. This work will be begun at an early date.

The work was done at a total cost of \$7,540.34, as per the accompanying list of cities and towns:—

Abington.	Harvard.	Rockland.
Acton.	Harwich.	Rowley.
Amesbury.	Haverhill.	Salisbury.
Andover.	Hudson.	Scituate.
Ashby.	Kingston.	Shrewsbury.
Ashland.	Lakeville.	Somerset.
Attleborough.	Lancaster.	Southborough.
Barnstable.	Leominster.	Sterling.
Bedford.	Lincoln.	Sudbury.
Bellingham.	Littleton.	Sutton.
Billerica.	Mansfield.	Swampscott.
Boxborough.	Marion.	Swansea.
Braintree.	Marlborough.	Taunton.
Brewster.	Marshfield.	Templeton.
Bridgewater.	Methuen.	Tewksbury.
Brockton.	Middleborough.	Townsend.
Chatham.	Millbury.	Tyngsborough.
Chelmsford.	Milton.	Wayland.
Concord.	Natick.	West Bridgewater.
Dennis.	Needham.	West Newbury.
Dighton.	Newbury.	Westford.
Dracut.	North Andover.	Weston.
Duxbury.	North Attleborough.	Weymouth.
Falmouth.	Northborough.	Wilmington.
Foxborough.	Norton.	Winchester.
Framingham.	Orleans.	Woburn.
Franklin.	Pepperell.	Worcester.
Groton.	Randolph.	Wrentham.
Groveland.	Reading.	Yarmouth.
Hamilton.	Rehoboth.	

Comparison of Work done on the Cape in 1910 and 1911.

	1910.	1911.
Barnstable,	\$48 00	\$42 92
Brewster,	8 40	34 33
Chatham,	2 50	8 58
Dennis,	11 80	25 75
Falmouth,	145 32	42 92
Harwich,	2 00	8 58
Orleans,	4 25	8 58
Yarmouth,	288 00	42 92
Material furnished by State Forester,	—	256 96
	\$510 27	\$471 54

Much more work was done in 1911 at a less cost.

Respectfully yours,

F. W. RANE,
State Forester.

APPENDIX E.

REPORT OF THE CHEMIST.

Massachusetts Highway Commission.

GENTLEMEN: — During the year 1911 systematic analyses of the bituminous road materials used during the year have been continued, and in all 241 samples have been submitted to the chemical and physical tests judged by us to be the most efficient in showing the character of these materials and their value in road work. Besides this, investigations have been made of analytical methods used in other States, the purpose of this work being to determine whether or no some of these methods were of sufficient value to copy. The methods of analysis followed by us during the year have been nearly identical with those given on pages 82-85, inclusive, of the report of your commission for 1910, the only changes being as follows: the time for the determination of the per cent. of each material lost by evaporation during heating at 100° C. has been changed from twenty-one to twelve hours, this change being made as it was evident that the longer period caused decomposition of some of the samples. During 1911, moreover, all of the samples have been examined to determine the percentage of paraffin present, this being done by the Saybolt method described on page 558 of "The Modern Asphalt Pavement" (Richardson).

Eighteen samples submitted by the different companies in the spring, to show the grade of material that could be furnished, have been examined during the year; 102 samples of standard macadam binder A; 40 samples of asphalt oil A; 11 samples of tarite, so called; 13 samples of water-gas tar; while the remaining samples have been of standard macadam binder B, Texas road binder, Bermudez oil, tarvia A, etc.

Speaking broadly most of the samples of asphaltic oils were within the limits of the specifications issued at the beginning of the year, although occasionally samples showing wide discrepancies from these specifications were received, and a very large number

of the samples frothed on heating. This frothing interfered with some of the determinations, especially with the determination of viscosity, but may not have been due entirely to water in the samples. Examinations to determine the cause of this frothing are now being made. The samples of refined tar, also, were very generally within the specifications issued, but of these samples a large proportion frothed on heating.

On studying the materials used in different towns as shown by the analyses made at the laboratory, it is evident that the same specified material differed considerably in different towns. For instance, the viscosity of standard macadam binder A used at Tyngsborough was 390, while as used in North Truro it was 540 and in Groveland 590. The viscosity of the asphalt oil A, used in different towns, varied from 240 in Southborough to 340 in Chester. Other slight differences are shown by the different analytical tests.

On the whole, however, it is evident, judging from laboratory tests only, that the materials furnished during 1911 were fully as good or better than those furnished during 1910.

Respectfully submitted,

H. W. CLARK,
Chemist.

BOSTON, MASS., Dec. 22, 1911.

APPENDIX F.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, AND CONSTRUCTION EXPENDITURES, TO DEC. 1, 1911.

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length constructed (Miles).	Construction Expenditures to Dec. 1, 1911.
		From —	Direction.	Length (Miles).		
Abington,	1900-1-3,	Brockton line,	Easterly,	1.73	1.74	\$32,667 68
Abington,	1905-7,	Holbrook line,	Easterly,	1.64	1.64	
Abington,	1911,	Weymouth line,	Southerly, . . . .	.95	.95	
Acton (Great Road),	1899-1900-1-2,	Concord line to Littleton line,	Northwesterly,	3.71	3.71	46,499 52
Acton (west),	1901-7,	Boxborough line,	Southwesterly,	1.67	1.67	
Acushnet,	1901-3,	Rochester line to Rochester line via Long Plain.	Westerly and northerly,	2.80	2.80	8,951 63
Acushnet,	1897,	Near New Bedford line,	Northerly, . . . .	.61	.61	
Adams (Maple Grove),	1897,	Cheshire line,	Northerly, . . . .	.57	.57	24,398 08
Adams (Orchard Street),	1908,	Cheshire line,	Northerly,	1.46	1.46	
Agawam,	1903-4-6-7-9,	South End bridge at Connecticut River,	Southerly,	3.10	3.10	46,560 95
Agawam,	1911,	End of 1909 section to Connecticut line,	Southerly, . . . .	.89	.89	
Amesbury,	1899-1901-3-4,	Merrimac line,	Easterly,	2.25	2.25	32,713 85
Amesbury,	1906-7,	Salisbury line,	Westerly, . . . .	.77	.77	
Anherst,	1901-4,	Hadley line,	Northeasterly, . . . .	.97	.97	11,612 42

Andover,	1805-6,	Lawrence line,	Southerly,	1.22	1.22	45,145 27
Andover,	1807-9-1800-2-3,	North Reading line,	Northerly,	2.97	2.97	841 89
Ashburnham,	1911,	New Hampshire State line,	Southeasterly, . . . . .	.67	.12	63,927 37
Ashby,	1804-5-6-7-8-9,	Fitchburg line to Ashby post office,	Northerly,	3.57	3.57	35,282 05
Ashby,	1910,	Townsend line,	Southwesterly, . . . . .	.48	.48	13,656 20
Ashby,	1911,	End of 1910 section,	Southwesterly, . . . . .	.44	.13	29,336 62
Ashfield,	1897-8,	One mile north of Ashfield post office,	Northerly,	1.61	1.61	20,722 11
Ashland,	1903,	Southborough line,	Easterly,	1.47	1.47	40,036 85
Ashland,	1910,	Framingham line,	Southerly,	1.73	1.73	5.28
Athol,	1895-6,	Orange line,	Easterly,	1.61	1.61	1.91
Athol,	1902-3,	Phillipston line,	Northwesterly,	1.49	1.49	4.27
Attleborough,	1900-1-3,	North Attleborough line,	Southwesterly,	2.65	2.65	1.22
Attleborough,	1909,	Norton line,	Northwesterly, . . . . .	.74	.74	2.26
Auburn,	1895-6-7-8-9-1901-3-4,	Worcester line to Oxford line,	Southwesterly,	5.28	5.28	49,957 14
Barnstable (north),	1909,	Yarmouth line,	Westerly,	1.91	1.91	1.48
Barnstable (north),	1899-1902-7-10,	Sandwich line,	Easterly,	4.27	4.27	2.89
Barnstable (north),	1911,	Easterly end of 1910 section,	Easterly,	1.22	1.22	5.56
Barnstable (south),	1897-1901,	Yarmouth line,	Westerly,	2.26	2.26	.59
Barnstable (west),	1904,	Marston Mills,	Southerly,	1.48	1.48	
Barre,	1897-9,	Ware River to Barre Common,	Northwesterly,	2.89	2.89	
Becket,	1902-4-5-6-8,	Chester line,	Westerly,	5.56	5.56	
Becket,	1910,	Point on Becket-Lee Road,	-	.59	.59	

1 Exclusive of 1,100 feet at railroad crossing.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Continued.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length (Miles).	Construction Ex- penditures to Dec. 1, 1911.
		From —	Direction.	Length (Miles).		
Bedford,	1897-1902,	Lexington line,	Northwesterly,	1.07	1.07	\$22,145 82
Bedford,	1903-6,	Carlisle bridge,	Southeasterly, . . . . .	.58	.58	
Belchertown,	1900-1-2-7-8,	Near depot,	Westerly,	2.35	2.35	22,534 14
Bellingham,	1902-5,	Blackstone line,	Northeasterly, . . . . .	.55	.55	
Bellingham,	1904-5-6,	Franklin line to Mendon line,	Westerly,	2.63	2.63	22,866 35
Berkley,	1906,	Lakeville line,	Northwesterly, . . . . .	.77	.77	5,142 81
Barnardston, ¹	1911,	Falls River to Gill line,	Easterly,	2.70	2.70	11,476 78
Beverly,	1895-7-8,	Wenham line,	Southerly,	2.01	2.01	
Beverly,	1905-6,	Manchester line,	Southwesterly,	3.67	3.67	33,169 42
Billerica,	1908,	Near "Common,"	Southeasterly, . . . . .	.58	.58	7,132 37
Blackstone,	1899-1900-2-9,	Uxbridge line,	Southeasterly,	2.55	2.55	
Blackstone,	1905,	Bellingham line to Woonsocket line,	Southwesterly, . . . . .	.06	.06	44,970 91
Boston,	1908,	Dedham line to Lagrange Street,	Northeasterly,	1.40	1.40	133,592 53
Bourne,	1897-8-1904,	Cohasset Narrows,	Easterly,	2.09	2.09	
Bourne, ²	1903-5-7-10,	Back River bridge,	Southerly,	3.53	3.53	37,444 77
Bourne,	1911,	Southerly end of 1910 section,	Southerly,	1.09	1.09	
Boxborough,	1897-9-1905-7,	Acton line to Harvard line,	Northwesterly,	3.31	3.31	20,568 34
Braintree,	1900-2,	Quincy line to Fore River,	Southeasterly,	1.06	1.06	14,798 70

Brewster,	1895-6-7-1901,	Dennis line to Orleans line,	Easterly,	. . . . .	7.78	7.78	31,001 31
Brewster,	1903,	Orleans line to Chatham line,	Southerly,	. . . . .	.04	.04	
Bridgewater,	1904-5-6-7-8,	Taunton River,	Northwesterly,	. . . . .	3.47	3.47	35,481 79
Brimfield,	1897-9,	Monson line,	Southerly,	. . . . .	2.34	2.34	
Brimfield,	1901-2,	Wales line,	Northerly,	. . . . .	1.63	1.63	24,917 96
Brockton,	1897-8-9,	Easton line,	Easterly,	. . . . .	1.87	1.87	
Brockton,	1900,	Abington line,	Westerly,	. . . . .	.66	.66	31,490 15
Brockton,	1904,	West Bridgewater line,	Northerly,	. . . . .	.66	.66	
Brookfield,	1902-3,	West Brookfield line,	Easterly,	. . . . .	.87	.87	
Brookfield,	1905-7,	Spencer line,	Southwesterly,	. . . . .	.77	.77	61,174 12
Brookfield,	1897-8-1900-4,	Brookfield village,	Easterly,	. . . . .	2.25	2.25	
Buckland,	1894-5-6-7-8-9-1900-3-7,	Shelburne Falls station,	Westerly and southerly,	. . . . .	4.29	4.29	62,580 95
Burlington,	1903-4-5-6,	Woburn line to Billerica line,	Northwesterly,	. . . . .	3.80	3.80	33,666 12
Canton,	1905-6-7-8,	Stoughton line,	Northerly,	. . . . .	3.23	3.23	25,555 28
Charlemont,	1897-8-9,	Deerfield River bridge,	Easterly,	. . . . .	.77	.77	19,782 22
Charlton,	1901-2,	Charlton depot to Charlton City,	Southerly,	. . . . .	1.91	1.91	
Charlton,	1905-6,	Near Charlton City,	Easterly,	. . . . .	.84	.84	
Charlton,	1909,	Near Charlton City,	Southerly,	. . . . .	.29	.29	61,174 12
Charlton,	1907-10,	Oxford line,	Southwesterly,	. . . . .	1.69	1.69	
Charlton,	1911,	Westerly end of 1910 section,	Southwesterly,	. . . . .	1.07	1.07	
Chatham,	1899-1901-2-5-6,	Depot Street to Harwich line,	Westerly,	. . . . .	4.04	4.04	45,769 35
Chatham,	1907,	Depot Street to Harwich line,	Northwesterly,	. . . . .	3.13	3.13	

¹ Exclusive of 143 feet at Boston & Maine bridge.² Exclusive of 275 feet at railroad crossing.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Continued.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length constructed (Miles).	Construction Expenditures to Dec. 1, 1911.
		From —	Direction.	Length (Miles).		
Chelmsford, ¹	1898-9-1901-7-10, . . .	Lowell line to Tyngsborough line, . . .	Westerly and northerly, . . .	2.42	2.42	
Chelmsford, . . .	1903-4, . . .	Lowell line toward Chelmsford Centre, . . .	Southwesterly, . . .	1.27	1.27	\$53,081 82
Chelmsford, . . .	1908, . . .	Near Chelmsford Centre, . . .	Southwesterly, . . .	.98	.98	
Chelmsford, . . .	1911, . . .	Southwesterly end of 1908 section, . . .	Southwesterly, . . .	1.54	1.10	
Chelsea, . . .	1901-4, . . .	Lewis Street and Eastern Avenue, . . .	Southwesterly, . . .	.96	.96	25,332 66
Cheshire, . . .	1899-1900-1-2-10, . . .	Lanesborough line, . . .	Northeasterly, . . .	4.19	4.19	57,738 77
Chester, . . .	1899-1900-1-2-4-5-9-10-11, . . .	Becket line to Huntington line, . . .	Southeasterly, . . .	6.62	6.62	73,528 19
Chicopee, . . .	1897-8-9, . . .	Springfield line, . . .	Northerly, . . .	.92	.92	
Chicopee, . . .	1902-3-4-5-6-7, . . .	Chicopee River, . . .	Northerly, . . .	2.97	2.97	51,693 54
Chilmark, . . .	1905-6-8-9, . . .	Beetlebung Corner, . . .	Northeasterly and southwesterly, . . .	4.99	4.99	31,023 38
Chilmark, . . .	1911, . . .	West Tisbury line, . . .	Southwesterly, . . .	1.23	.62	
Clarksburg, . . .	1905-7, . . .	North Adams line, . . .	Northeasterly and northerly, . . .	.97	.97	
Clarksburg, . . .	1909, . . .	Red Mill bridge, . . .	Northerly, . . .	.12	.12	14,466 74
Cohasset, ² . . .	1897-8-1900, . . .	Near Hingham line, . . .	Easterly, . . .	1.73	1.73	16,354 71
Cohasset, . . .	1902-3, . . .	Beechwood Street to Scituate line, . . .	Southerly, . . .	.55	.55	
Colrain, . . .	1898-1901-5, . . .	Shelburne line, . . .	Northerly, . . .	2.13	2.13	13,432 80
Concord, . . .	1897-8, . . .	Lincoln line, . . .	Northwesterly, . . .	1.47	1.47	38,856 08
Concord, . . .	1900-5-6, . . .	Acton line, . . .	Southeasterly, . . .	2.12	2.12	
Dalton, . . .	1895-6-1903-4, . . .	Pittsfield line, . . .	Easterly, . . .	2.56	2.56	30,323 97

Dartmouth,	.	.	.	1898-9-1900-1-3-5,	.	New Bedford line to Smith's Mills,	.	Westorly,	.	.	.	4.54	37,324 72
Dedham,	.	.	.	1908,	.	Boston line,	.	Southerly,	.	.	.	.03	1,040 87
Deerfield,	.	.	.	1894-5,	.	South Deerfield to Sunderland bridge,	.	Southeasterly,	.	.	.	1.53	
Deerfield,	.	.	.	1900-1-2-3,	.	Deerfield River bridge,	.	Southerly,	.	.	.	1.44	
Deerfield,	.	.	.	1904-5-6-7-8-9-10,	.	South Deerfield,	.	Northerly,	.	.	.	4.32	85,560 20
Deerfield,	.	.	.	1911,	.	At Wapping Underpass,	.	Connecting 1910 sections,	.	.	.	.08	
Dennis (north),	.	.	.	1895-6-7-8,	.	Yarmouth line to Brewster line,	.	Northeasterly,	.	.	.	4.27	51,296 96
Dennis (south),	.	.	.	1900-1-2-4-6,	.	Bass River to Harwich line,	.	Easterly,	.	.	.	3.23	
Dighton (north),	.	.	.	1902-3,	.	Taunton line to Rehoboth line,	.	Easterly,	.	.	.	1.56	
Dighton (south),	.	.	.	1905-6-8,	.	Three Mile River bridge,	.	Southwesterly,	.	.	.	1.22	
Dighton (south),	.	.	.	1911,	.	Southerly end of 1908 section,	.	Southerly,	.	.	.	.78	39,450 60
Dighton (south),	.	.	.	1909-10,	.	Near Somerset line,	.	Northerly,	.	.	.	1.09	
Douglas,	.	.	.	1902-4,	.	Sutton line at Manehaug,	.	Southeasterly,	.	.	.	1.60	19,982 31
Douglas,	.	.	.	1905,	.	Main Street,	.	Southeasterly,	.	.	.	.54	
Dover,	.	.	.	1905-7,	.	Charles River,	.	Westorly,	.	.	.	2.18	11,528 29
Draut,	.	.	.	1905-6-7,	.	Near Lowell line on Medhuen Road,	.	Northeasterly,	.	.	.	1.83	16,464 08
Dudley,	.	.	.	1902-4-6-7,	.	Near Webster line,	.	Southwesterly,	.	.	.	2.29	25,442 00
Duxbury,	.	.	.	1894-5-7-9-1903-5-8-9,	.	Marshfield line to Kingston line,	.	Southerly,	.	.	.	5.16	37,486 65
Eastham,	.	.	.	1903-4-5-6-9,	.	Wellfleet line to Orleans line,	.	Southerly,	.	.	.	6.46	26,238 48
Easthampton,	.	.	.	1895-6,	.	Northampton line,	.	Southwesterly,	.	.	.	1.32	
Easthampton,	.	.	.	1900-1,	.	Mount Tom at Clark Street,	.	Northerly,	.	.	.	1.10	21,382 79
East Longmeadow,	.	.	.	1904-6-10,	.	Springfield line to village,	.	Southeasterly,	.	.	.	1.80	19,807 65

1 Exclusive of 1,000 feet at railroad crossing.

2 Exclusive of 800 feet at railroad crossing.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Continued.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length constructed (Miles).	Construction Expenditures to Dec. 1, 1911.
		From —	Direction.	Length (Miles).		
Easton,	1900,	Brockton line,	Southwesterly, . . . . .	.80	.80	\$4,367 93
Edgartown,	1897-9-1900-1-2-3,	Oak Bluffs line,	Southerly,	2.42	2.42	17,478 26
Erving,	1898-9-1900,	Town hall to Orange line,	Easterly,	2.04	2.04	
Erving,	1907-9-10,	Millers Falls,	Easterly,	3.26	3.26	63,034 91
Erving,	1911,	Near town hall,	Northwesterly, . . . . .	.12	.12	
Essex,	1902-3,	Essex River,	Easterly and westerly, . . . . .	.35	.35	9,182 00
Fairhaven,	1894-5,	Mattapoisett line,	Westerly,	1.45	1.45	14,366 53
Falmouth,	1904,	Bourne line to Woods Hole,	Southerly,	11.66	11.66	41,720 44
Falmouth,	1905-6-7-8-9-10,	East Falmouth to Waquoit,	Easterly,	3.90	3.90	
Fitchburg,	1894-5,	Westminster line,	Easterly, . . . . .	.97	.97	
Fitchburg,	1897,	Lunenburg line,	Westerly, . . . . .	.60	.60	51,116 91
Fitchburg,	1900-1-3-4,	Ashby line,	Southerly,	2.55	2.55	
Foxborough,	1901-2,	Mansfield line,	Northerly,	1.81	1.81	19,537 02
Foxborough,	1905-8,	Wrentham line,	Southeasterly,	1.70	1.70	
Framingham,	1904-5,	Southborough line, Pleasant Street,	Southeasterly,	2.42	2.42	17,090 04
Framingham,	1910,	Ashland line, Hollis Street,	Northerly, . . . . .	.79	.79	
Franklin,	1905-7-10,	Bellingham line,	Northeasterly,	2.58	2.58	21,546 15
Franklin,	1911,	Wrentham line,	Northwesterly,	1.18	-	

Freetown,	.	.	.	.	.	New Bedford line to Lakeville line,	.	Northerly,	.	.	.	3.19
Freetown,	.	.	.	.	.	Fall River line, Assonet,	.	Northeasterly,	.	.	.	.68
Gardner,	.	.	.	.	.	Templeton line,	.	Easterly,	.	.	.	2.38
Gardner,	.	.	.	.	.	Westminster line,	.	Northwesterly,	.	.	.	.98
Gloucester,	.	.	.	.	1894-5-8-1905-6-7,	Manchester line to "Cut bridge,"	.	Northerly,	.	.	.	3.46
Gloucester,	.	.	.	.	1907,	Rockport line,	.	Southerly,	.	.	.	.52
Goshen,	.	.	.	.	1894-5-8,	Williamsburg line,	.	Northwesterly,	.	.	.	2.46
Grafton,	.	.	.	.	1897-9-1900-5,	Millbury line,	.	Southeasterly,	.	.	.	2.05
Granby,	.	.	.	.	1894-1902-5-6-8,	South Hadley line,	.	Easterly,	.	.	.	2.26
Granby,	.	.	.	.	1911,	North Street,	.	Easterly,	.	.	.	1.50
Great Barrington,	.	.	.	.	1894-6-7-1902,	Housatonic River bridge,	.	Easterly,	.	.	.	3.41
Greenfield, ¹	.	.	.	.	1899-1900-2,	Washington Street,	.	Easterly,	.	.	.	1.33
Greenfield,	.	.	.	.	1903-6-7-8-10,	Barnardston line,	.	Southwesterly,	.	.	.	3.77
Greenfield,	.	.	.	.	1905,	Point on Colrain Road,	.	Northerly,	.	.	.	.26
Groton,	.	.	.	.	1901-2-7,	Pepperell line,	.	Southeasterly,	.	.	.	1.41
Groveland,	.	.	.	.	1900-1-2-5,	Merrimae River bridge to West Newbury line.	.	Northeasterly,	.	.	.	1.72
Hadley,	.	.	.	.	1894-1904,	Connecticut River to Amherst line,	.	Easterly,	.	.	.	4.69
Hamilton,	.	.	.	.	1899-1900,	Ipswich line,	.	Southwesterly,	.	.	.	1.44
Hamilton,	.	.	.	.	1909-10,	Wenham line,	.	Northeasterly,	.	.	.	1.22
Hancock,	.	.	.	.	1895-6-8-9,	Pittsfield line to New York line,	.	Westerly,	.	.	.	3.23
Hanover,	.	.	.	.	1906-8,	Pembroke line,	.	Northwesterly,	.	.	.	1.85
Hardwick,	.	.	.	.	1897-1901,	New Braintree line,	.	Northerly,	.	.	.	.82

Exclusive of 500 feet at Cheapside bridge and 1,100 feet at railroad crossing.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Continued.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length constructed to Dec. 1, 1911.	Construction Expenditures to Dec. 1, 1911.
		From —	Direction.	Length (Miles).		
Harvard,	1900-5-10,	Boxborough line to Harvard Common,	Westerly,	2.31	2.31	\$29,361 41
Harwich,	1899-1900-1-2-3,	Dennis line to Chatham line,	Easterly,	5.10	5.10	33,403 04
Harwich,	1908,	Chatham line to Brewster line,	Northerly,	1.38	1.38	
Hatfield,	1901-6-8-9-10,	Northampton line,	Northerly,	2.65	2.65	49,906 50
Hatfield,	1911,	Whately line,	Southerly,	.89	.89	
Haverhill,	1902-7-10,	Kenosha Road to Merrimac line,	Easterly,	2.66	2.66	75,798 72
Haverhill,	1899,	River and Maxwell Street to Methuen line,	Westerly,	2.63	2.63	
Hingham,	1894,	Weymouth Back River,	Easterly,	1.42	1.42	15,990 41
Hingham,	1896-7,	Near Cohasset line,	Westerly,	1.24	1.24	
Hinsdale,	1901-2-3,	Dalton line,	Southeasterly,	1.02	1.02	13,488 38
Holbrook,	1894-6-1902,	Weymouth line,	Northwesterly,	1.75	1.75	15,373 19
Holden,	1898-1900-8,	Worcester line to Jefferson village,	Northwesterly,	4.21	4.21	51,235 95
Holden,	1905,	Rutland line,	Easterly,	.52	.52	
Holliston,	1906-7-10,	Milford line,	Northeasterly,	3.32	3.32	31,661 91
Holliston,	1911,	Ashland line,	Southerly,	.71	.71	22,601 99
Holyoke,	1910,	Easthampton line,	Southerly,	4.16	4.16	8,142 03
Hudson,	1906-7,	Brigham Street to Marlborough line,	Southerly,	1.14	1.14	
Huntington,	1895-6,	Russell line,	Westerly,	1.01	1.01	28,076 03
Huntington,	1903-6-9,	Chester line,	Southeasterly,	1.25	1.25	

Ipswich,	1907-8-9,	Hamilton line to Ipswich Common,	Northerly,	2.13	2.13	39,778 32
Ipswich,	1910,	Rowley line,	Southerly,	1.37	1.37	
Ipswich, ¹	1911,	Southerly end of 1910 section,	Southerly, . . . . .	.92	.92	
Kingsdon,	1905-6,	Duxbury line,	Southerly,	1.02	1.02	7,362 67
Lakeville,	1901-2,	Near Middleborough line,	Southwesterly,	3.57	3.57	
Lakeville,	1910,	Freetown line,	Northerly,	1.94	1.94	39,925 57
Lakeville,	1911,	Northerly end of 1910 section,	Northerly,	1.45	1.45	
Lancaster, ²	1902,	Clinton line to Sterling line,	Northerly,	1.25	1.25	7,342 74
Lanesborough, ³	1911,	Cheshire line,	Southerly,	1.72	1.72	14,542 80
Lawrence,	1896,	Methuen line,	Southerly, . . . . .	.27	.27	2,079 55
Lee,	1894-5-6-1908-9,	Lee Park to Strickland House,	Easterly,	2.86	2.86	
Lee,	1900,	Lenox line to Lee village,	Southerly,	1.26	1.26	60,111 53
Lee,	1906,	Lenox line, Stockbridge Street,	Southerly,	1.03	1.03	
Lee (south),	1906,	Stockbridge line, Main Street,	Easterly, . . . . .	.90	.90	
Leicester, ⁴	1894-5-6-8-9,	Worcester line to Spencer line,	Westerly,	4.87	4.87	67,144 37
Lenox,	1890-1900-1,	Lee line to Lenox village, Walker Street,	Northerly,	2.28	2.28	
Lenox,	1904-5,	Pittsfield line to Lenox village,	Southerly,	3.18	3.18	39,093 59
Lenox,	1906,	Lee line to Lenox village, Kemble Street,	Northerly,	2.20	2.20	
Leominster,	1901-2,	Sterling line,	Northerly,	2.18	2.18	21,432 81
Lexington,	1895-6-7-8,	Massachusetts Avenue,	Westerly,	3.44	3.44	37,861 72
Lexington,	1900,	Bedford line,	Southwesterly, . . . . .	.85	.85	
Lincoln,	1895-6-7,	Lexington line to Concord line,	Northwesterly,	2.06	2.06	16,362 46

¹ Exclusive of 67 feet at railroad bridge.² Exclusive of 1,100 feet at railroad crossing.³ Exclusive of 1,280 feet at railroad crossing.⁴ Exclusive of portion through Leicester village.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Continued.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length constructed to Dec. 1, 1911.	Construction Expenditures to Dec. 1, 1911.
		From —	Direction.	Length (Miles).		
Littleton,	1902-3-4,	Acton line, Great Road,	Northerly,	2.65	2.65	\$14,102 13
Littleton,	1902,	Westford line to Great Road,	Southwesterly, . . . .	.32	.32	
Lowell (Boulevard),	1897,	Tyngsborough line,	Easterly, . . . .	.97	.97	22,892 23
Lowell (Princeton Street),	1897-8,	Chelmsford line,	Easterly,	1.33	1.33	
Lunenburg,	1898-9-1900-1-3-10,	Fitchburg line,	Easterly,	4.12	4.12	36,479 86
Lynn,	1899,	Saugus River to Sea Street,	Northeasterly, . . . .	.90	.90	140,944 06
Mansfield,	1901,	Foxborough line,	Southeasterly, . . . .	.72	.72	10,068 19
Mansfield,	1906,	Norton line,	Northerly, . . . .	.49	.49	
Marion,	1894-5-1911,	Marion village to Wareham line,	Northeasterly,	1.59	1.59	
Marion,	1897-9-1901-2,	Marion village to Mattapoissett line,	Westerly,	1.84	1.84	30,984 13
Marion,	1903,	Marion village to Rochester line,	Northwesterly,	2.14	2.14	
Marlborough (east),	1897-1902-3-4,	Sudbury line to Hosmer Street,	Westerly,	3.10	3.10	
Marlborough (west),	1897-9-1900-1,	Northborough line,	Easterly,	2.42	2.42	63,684 51
Marlborough,	1908,	Hudson line,	Southerly, . . . .	.81	.81	
Marlborough,	1911,	Southerly end of 1910 section,	Southwesterly, . . . .	.46	-	54,256 61
Marshfield,	1894-1910,	Duxbury line to North River bridge,	Northwesterly,	8.28	8.28	
Mattapoissett,	1894-5,	Fairhaven line,	Easterly,	1.16	1.16	24,528 57
Mattapoissett,	1900-1-3,	Marion line,	Westerly,	2.05	2.05	
Mashpee,	1911,	Falmouth line,	Northeasterly,	1.83	1.83	7,063 06

Medford,	.	.	.	.	.	Somerville line via Mystic Avenue,	.	Northerly,	.	.	.	.	.86	30,974 24
Melrose,	.	.	.	.	.	Saugus line, Upham Street,	.	Westerly,	.	.	.	.	.40	5,056 49
Merrimac,	.	.	.	.	.	Haverhill line,	.	Easterly,	.	.	.	.	1.03	23,302 69
Merrimac,	.	.	.	.	.	Amesbury line,	.	Southwesterly,	.	.	.	.	1.20	39,868 20
Methuen,	.	.	.	.	.	Lawrence line to Haverhill line,	.	Northeasterly,	.	.	.	.	3.69	57,594 33
Middleborough,	.	.	.	.	.	Nemasket River to Rochester line,	.	Southeasterly,	.	.	.	.	8.98	31,014 44
Middleborough,	.	.	.	.	.	Bridgewater line to railroad bridge,	.	Southerly,	.	.	.	.	3.47	28,157 11
Milford,	.	.	.	.	.	Hopedale line via West Street,	.	Southeasterly,	.	.	.	.	1.75	11,344 26
Milford,	.	.	.	.	.	Holliston line,	.	Southwesterly,	.	.	.	.	1.80	16,177 00
Millbury,	.	.	.	.	.	Worcester line to Grafton line,	.	Southeasterly,	.	.	.	.	.78	50,034 75
Millbury,	.	.	.	.	.	Worcester line, Main Street,	.	Southerly,	.	.	.	.	1.61	52,893 84
Millbury,	.	.	.	.	.	Sutton line,	.	Northeasterly,	.	.	.	.	.59	21,563 53
Milton, ¹	.	.	.	.	.	Neponset River at Granite bridge,	.	Southeasterly,	.	.	.	.	.87	
Monson,	.	.	.	.	.	Railroad bridge toward Palmer,	.	Northerly,	.	.	.	.	.93	
Monson,	.	.	.	.	.	Palmer line to Brimfield line,	.	Southeasterly,	.	.	.	.	.39	
Monson,	.	.	.	.	.	Palmer line,	.	Easterly and westerly,	.	.	.	.	.29	
Montague,	.	.	.	.	.	Third Street near L Street, Turners Falls,	.	Easterly,	.	.	.	.	4.05	
Montague,	.	.	.	.	.	Connecticut River bridge,	.	Northeasterly,	.	.	.	.	1.68	
Nantucket,	.	.	.	.	.	First mile stone to Siasconset,	.	Easterly,	.	.	.	.	6.48	
Natick,	.	.	.	.	.	Wellesley line to Lincoln Square,	.	Westerly,	.	.	.	.	1.14	
Natick,	.	.	.	.	.	Sherborn line to Cemetery Street,	.	Easterly,	.	.	.	.	2.06	

¹ Exclusive of 1,000 feet at railroad crossing.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Continued.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length constructed (Miles).	Construction expenditures to Dec. 1, 1911.
		From —	Direction.			
Needham,	1901,	Newton line,	Westerly,	1.00	1.00	\$11,313 34
Needham,	1905,	Charles River bridge, Chestnut Street,	Northerly,	1.03	1.03	
New Braintree,	1897,	Hardwick line to Ware line,	Southerly, . . . . .	.17	.17	3,944 07
New Braintree,	1903,	New Braintree village,	Northerly, . . . . .	.23	.23	
Newbury,	1899-1906,	Newburyport line to Rowley line,	Southerly and southwesterly,	4.23	4.23	33,293 45
Newburyport,	1896-7-8,	West Newbury line,	Easterly,	1.75	1.75	
Newton,	1901,	Needham line,	Easterly,	1.03	1.03	6,554 87
Norfolk,	1895,	Walpole line to Wrentham line,	Southwesterly,	1.45	1.45	
North Adams,	1894-6-7,	Williamstown line,	Easterly,	1.69	1.69	16,597 44
North Adams,	1900-1-2-3,	Ashland Street bridge to Adams line,	Southerly,	2.32	2.32	
North Andover,	1900-2-4,	Lawrence line,	Southeasterly,	1.90	1.90	36,922 09
North Andover,	1907,	Park, Pleasant and Court streets,	Southwesterly, . . . . .	.24	.24	
North Andover,	1907-10,	Junction of Sutton and Clark streets,	Northeasterly,	1.24	1.24	57,876 63
North Andover,	1911,	Connecting 1907 sections,	- - - - -	1.54	1.44	
Northampton,	1894,	Hadley bridge,	Southwesterly, . . . . .	.56	.56	61,147 14
Northampton,	1897-8-9-1900-5,	Easthampton line,	Northeasterly,	1.47	1.47	
North Attleborough,	1894-5-6-7-9,	Bruce Avenue to Attleborough line,	Southwesterly,	3.60	3.60	24,168 98

Northborough (east), .	1897-8, .	Marlborough line, .	Southwesterly, .	1.33	1.33	
Northborough, .	1911, .	Westerly end of 1898 section, .	Westerly, .	.47	.47	30,382 79
Northborough (west), .	1900-2-4, .	Shrewsbury line, .	Easterly, .	2.19	2.19	
Northborough (south), .	1897, .	Westborough line, .	Northwesterly, .	.42	.42	
North Brookfield, .	1905-6-7-8-10, .	Brookfield line, .	Northerly, .	2.25	2.25	31,295 14
Northfield, .	1901-2, .	Near Mill Brook, .	Southerly, .	1.16	1.16	9,966 84
North Reading, .	1897-8-1901-3, .	Andover line, .	Southerly, .	2.31	2.31	22,406 36
North Reading, .	1911, .	Connecting sections at railroad bridge, .	-	.23	.23	
Norton, .	1906, .	Mansfield line, .	Southerly, .	.50	.50	9,945 55
Norton, .	1908-9-11, .	Attleborough line to railroad station, .	Easterly, .	4.19	4.19	
Norwood (south), .	1897-9, .	Walpole line, .	Northerly, .	1.03	1.03	19,790 13
Norwood (north), .	1895-6, .	Westwood line, .	Southerly, .	1.02	1.02	
Oak Bluffs, .	1894-5-6, .	Sengekontacket bridge, .	Northerly, .	2.37	2.37	20,929 85
Orange, .	1894-5-7, .	Athol line, .	Westerly, .	2.18	2.18	52,964 68
Orange, .	1900-1-3-4-5, .	Erving line, .	Easterly, .	2.62	2.62	
Orleans, .	1900-1-4, .	Brewster line to Eastham line, .	Northeasterly, .	1.98	1.98	20,341 94
Orleans, .	1903-4-5, .	Brewster line towards Shattuck's Corner, .	Northerly and northwesterly, .	2.72	2.72	
Oxford, .	1906-7, .	Auburn line, .	Southwesterly, .	.85	.85	22,686 41
Oxford, .	1908-9, .	Charlton line, .	Northeasterly, .	1.34	1.34	
Palmer, .	1899-1900-1, .	Tennyville to Monson line, .	Southeasterly, .	2.52	2.52	
Palmer, .	1905-8, .	Near Quabog River bridge to Warren line, .	Easterly, .	5.29	5.29	120,184 12
Palmer, .	1906-8-9, .	Wilbraham line, .	Easterly, .	2.11	2.11	

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Continued.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length (Miles).	Construction Ex- penditures to Dec. 1, 1911.
		From —	Direction.	Length (Miles).		
Paxton,	1895-1902,	Worcester line,	Northwesterly,	3.60	3.00	\$47,640 94
Pembroke,	1905,	Hanover line,	Southerly, . . . . .	.35	.35	2,943 64
Pepperell,	1907-10,	Nashua River bridge,	Northwesterly, . . . . .	.83	.83	22,660 05
Pepperell,	1911,	Westerly end of 1910 section,	Northwesterly,	1.17	1.17	
Phillipston,	1897-8-1902-4-9,	Athol line to Templeton line,	Easterly and northeasterly,	2.78	2.78	31,102 16
Pittsfield,	1894-8-1901-2,	Hancock line,	Easterly,	3.05	3.05	
Pittsfield,	1897-1906-7,	Dalton line,	Southwesterly,	2.37	2.37	80,476 55
Pittsfield,	1894-5,	South Mountain Road to Lenox line,	Southerly,	1.58	1.58	
Plainville,	1894-5,	Wrentham line,	Southerly,	1.81	1.81	5,877 78
Plainville,	1911,	North Attleborough line,	Northerly, . . . . .	.49	.49	
Plymouth,	1894-1904,	Manomet village,	Northerly,	5.05	5.05	73,479 38
Plymouth,	1907-10,	Manomet village,	Southerly,	2.26	2.26	
Plymouth,	1911,	End of 1910 section,	Southerly,	2.60	1.10	
Princeton,	1897-1900-2-3,	Princeton depot,	Easterly,	2.23	2.23	21,921 14
Provincetown,	1901-3,	Turo line to Allerton Street,	Westerly,	1.10	1.10	7,669 68
Quincy,	1899,	Chubbuck Street to Fore River bridge,	Southeasterly, . . . . .	.49	.49	
Quincy,	1902-9,	Braintree line,	Northerly, . . . . .	.95	.95	26,587 83
Quincy,	1904,	Randolph line to Milton line,	Northerly,	1.23	1.23	
Randolph,	1902-3-9,	Quincy line,	Southeasterly,	1.90	1.90	13,265 20

Raynham,	1901-2-3,	Taunton line,	Northeasterly,	1.48	1.48	13,953 79
Reading,	1899-1900,	Stoneham line,	Northerly,	1.07	1.07	29,066 39
Reading,	1902-3,	North Reading line,	Southerly,	2.67	2.67	53,370 57
Rehoboth,	1895-1903,	Seekonk line to Dighton line,	Easterly,	6.03	6.03	58,613 49
Revere,	1897-8,	Boston line,	Northeasterly, . . . . .	.58	.58	33,207 08
Revere,	1899,	Saugus line,	Southwesterly, . . . . .	.67	.67	6,674 70
Richmond,	1897-1907,	Railroad station to Pittsfield line,	Northerly,	4.02	4.02	13,442 30
Rochester,	1903,	Marion line to Acushnet line,	Westerly,	5.27	5.27	19,112 49
Rochester,	1909,	Middleborough line to Wareham line,	Southeasterly, . . . . .	.90	.90	18,921 06
Rockland,	1902-5-6,	Abington line to Hanover line,	Easterly,	2.35	2.35	84,371 81
Rockport,	1902-6-10,	Gloucester line,	Northerly,	1.60	1.60	8,981 39
Rowley,	1905-7-8-9,	Newbury line,	Southwesterly,	2.90	2.90	18,080 66
Rowley,	1911,	Ipswich line,	Northerly, . . . . .	.74	.60	30,805 05
Russell,	1894-5-6-7-8-9,	Westfield line to Huntington line,	Northeasterly,	6.66	6.66	33,991 65
Rutland,	1904,	Holden line,	Northwesterly,	1.16	1.16	34,731 92
Salem,	1901-9,	Swampscott line,	Northeasterly,	1.40	1.40	
Salisbury,	1904-5,	Town Creek,	Northerly and southerly,	1.43	1.43	
Salisbury,	1910,	New Hampshire line to village,	Southerly,	2.41	2.41	
Salisbury,	1911,	Amesbury line,	Easterly,	1.23	.40	
Sandwich,	1897-8-1900-2-10,	Barnstable line,	Westerly,	4.31	4.31	
Saugus,	1899,	Fox Hill bridge to Revere line,	Southerly,	1.60	1.60	
Saugus,	1906,	Melrose line,	Southwesterly, . . . . .	.19	.19	

¹ Exclusive of 600 feet at railroad crossing.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Continued.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length (Miles).	Length con- structed (Miles).	Construc- tion Ex- penditures to Dec. 1, 1911.
		From —	Direction.				
Situate,	1894-1910,	Cohasset line to Marshfield line,	Southerly,	.	5.37	5.37	\$48,998 99
Seekonk,	1900-1-2-4,	Rehoboth line to Rhode Island line,	Westerly,	.	2.76	2.76	
Seekonk,	1910,	Perry Avenue via Fall River Avenue,	Southeasterly,	.	1.50	1.50	25,167 09
Seekonk,	1911,	Southerly end of 1910 section,	Southeasterly,	.	1.01	—	
Sharon,	1908,	Foxborough line,	Northeasterly,	.	.64	.64	4,849 32
Shelburne,	1894-5-6,	Bridge Street to Colrain line,	Northeasterly,	.	2.16	2.16	24,024 14
Shrewsbury,	1895-1904,	Worcester line to Northborough line,	Northeasterly,	.	4.86	4.86	48,858 01
Somerset,	1895-1910,	Slade's Ferry bridge,	Northerly,	.	5.38	5.38	
Somerset,	1903-4-9,	Slade's Ferry bridge to Swansea line,	Northeasterly,	.	2.40	2.40	66,269 48
Somerset,	1909,	Slade's Ferry bridge, Brayton Avenue,	Northerly,	.	.22	.22	
Somerville,	1908,	Medford line via Mystic Avenue,	Southeasterly,	.	1.16	1.16	35,822 22
Southampton,	1905-9,	Easthampton line,	Southerly,	.	.71	.71	13,948 99
Southborough,	1902-5,	Westborough line,	Easterly,	.	1.89	1.89	
Southborough,	1907,	Ashland line,	Westerly,	.	.65	.65	22,148 17
Southborough,	1909,	Framingham line,	Southwesterly,	.	1.15	1.15	
Southbridge,	1902,	Charlton line,	Southwesterly,	.	.91	.91	11,058 18
Southbridge,	1907,	Sturbridge line,	Easterly,	.	.45	.45	
South Hadley,	1895-7-8-9-1900,	Granby line to South Hadley Falls,	Southwesterly,	.	2.42	2.42	44,898 08
South Hadley,	1903-4-9,	South Hadley Falls,	Northerly,	.	3.33	3.33	

Spencer,	.	.	.	.	.	.	.	.	.	Westery,	.	.	.	.	1.60	42,468 06
Spencer,	.	.	.	.	.	.	.	.	.	Easterly,	.	.	.	.	1.43	
Spencer,	.	.	.	.	.	.	.	.	.	-	-	-	-	-	.03	
Sterling,	.	.	.	.	.	.	.	.	.	Southwesterly,	.	.	.	.	1.29	
Sterling,	.	.	.	.	.	.	.	.	.	Southwesterly,	.	.	.	.	1.84	35,631 90
Sterling,	.	.	.	.	.	.	.	.	.	Southerly,	.	.	.	.	.56	
Stockbridge,	.	.	.	.	.	.	.	.	.	Westerly,	.	.	.	.	1.06	23,496 55
Stockbridge,	.	.	.	.	.	.	.	.	.	Southwesterly,	.	.	.	.	2.24	
Stoneham,	.	.	.	.	.	.	.	.	.	Northerly,	.	.	.	.	.57	14,886 90
Stoneham,	.	.	.	.	.	.	.	.	.	Southerly,	.	.	.	.	1.01	
Stoughton,	.	.	.	.	.	.	.	.	.	Southerly,	.	.	.	.	1.16	21,030 80
Stoughton, ¹	.	.	.	.	.	.	.	.	.	Northerly,	.	.	.	.	2.14	
Sturbridge,	.	.	.	.	.	.	.	.	.	Northwesterly,	.	.	.	.	2.36	29,214 79
Sudbury,	.	.	.	.	.	.	.	.	.	Easterly,	.	.	.	.	5.11	36,074 70
Sunderland,	.	.	.	.	.	.	.	.	.	Southeasterly and southerly,	.	.	.	.	1.56	22,919 54
Sutton,	.	.	.	.	.	.	.	.	.	Southerly,	.	.	.	.	1.46	15,405 41
Sutton,	.	.	.	.	.	.	.	.	.	Northerly,	.	.	.	.	.82	
Swampscott,	.	.	.	.	.	.	.	.	.	Southwesterly,	.	.	.	.	1.49	29,433 53
Swansea,	.	.	.	.	.	.	.	.	.	Northwesterly,	.	.	.	.	3.35	
Swansea,	.	.	.	.	.	.	.	.	.	Northwesterly,	.	.	.	.	.69	33,917 18
Swansea,	.	.	.	.	.	.	.	.	.	Southeasterly,	.	.	.	.	1.93	

¹ Exclusive of 250 feet at railroad bridge.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Continued.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length constructed to Dec. 1, 1911.	Construction Expenditures to Dec. 1, 1911.
		From —	Direction.	Length (Miles).		
Taunton,	1895-6-8-9-1900-1,	Dighton line, Winthrop Street,	Easterly,	2.94	2.94	\$42,995 36
Taunton,	1905-6,	Dighton line, Somerset Avenue,	Northeasterly,	1.07	1.07	
Taunton,	1907,	Railroad crossing, County Street,	Southeasterly, . . . . .	.66	.66	
Templeton,	1899-1901-2-3,	Gardner line at Otter River,	Westerly,	2.00	2.00	66,575 12
Templeton,	1905-6-7-8-9,	Phillipston line to Baldwinsville,	Northeasterly,	3.69	3.69	
Tewksbury,	1900-1-2-3-4-5-6,	Lowell line to Wilmington line,	Southeasterly,	6.35	6.35	53,594 83
Tisbury,	1894,	Vineyard Haven to West Tisbury line,	Southwesterly,	1.93	1.93	14,611 70
Townsend,	1896-1911,	Groton line to Ashby line,	Northwesterly,	6.04	6.04	46,230 13
Truro,	1895-1906,	Wellfleet line via Kelley's Corner,	Northerly,	3.16	3.16	37,692 93
Tyngsborough,	1895-6,	Tyngsborough bridge to Lowell line,	Southeasterly,	2.95	2.95	44,372 66
Tyngsborough,	1909,	New Hampshire line,	Southerly,	1.87	1.87	
Tyngsborough,	1910,	Chelmsford line,	Northerly, . . . . .	.45	.45	
Tyngsborough,	1911,	Northerly end of 1910 section,	Northerly, . . . . .	.81	.81	
Uxbridge,	1897-8-1901-3,	Blackstone line,	Northwesterly,	2.18	2.18	27,011 59
Uxbridge,	1909-10,	Blackstone River,	Northwesterly, . . . . .	.76	.76	
Wales,	1901,	Brimfield line,	Southwesterly,	1.04	1.04	3,963 17
Walpole (south),	1894-5-7-1900,	Norfolk line,	Northerly,	2.60	2.60	43,520 00
Walpole (north),	1897-8-1900,	Norwood line,	Southerly,	1.94	1.94	
Walpole,	1911,	Stetson bridge, . . . . .	- . . . .	.03	-	

Ware,	1897-9-1900-3,	New Braintree line,	Southerly,	2.28	2.28	28,461 91
Ware,	1900-10,	Junction of Palmer and Belchertown roads,	Northeasterly,	1.90	1.90	
Wareham,	1896-1901,	Wewantit River bridge, Marion line,	Northeasterly, . . . . .	.71	.71	
Wareham,	1906-7-10,	High Street on Marion Road,	Southwesterly,	1.48	1.48	
Wareham,	1898-1901,	Cohasset Narrows bridge,	Westerly,	1.82	1.82	57,324 43
Wareham,	1905-6-7-8,	Parker's Mills to Rochester line,	Northwesterly,	3.53	3.53	
Wareham,	1910,	Wareham Narrows bridge,	Easterly, . . . . .	.88	.88	
Warren,	1896-7-8-1907-8,	Warren village to Palmer line,	Westerly,	2.68	2.68	45,665 85
Warren,	1899-1900-1,	Warren to West Brookfield line,	Easterly,	1.42	1.42	
Watertown,	1895-6,	Walham line,	Easterly, . . . . .	.85	.85	13,066 99
Wayland,	1897-1900-3,	Weston line to Sudbury line,	Westerly,	2.58	2.58	21,506 92
Webster,	1908,	Lake Street and Thompson Road,	Southerly, . . . . .	.65	.65	6,107 91
Webster,	1911,	Oxford line,	Southerly, . . . . .	.84	.21	
Wellesley,	1901,	Natick line to Blossom Street,	Easterly,	1.18	1.18	6,841 36
Wellesley,	1903-4-5-7,	Eastham line,	Northerly,	4.65	4.65	9,364 18
Wenham,	1897-1901-3,	Beverly line to Hamilton line,	Northerly,	1.76	1.76	13,178 53
Westborough,	1897,	Northborough line,	Southeasterly, . . . . .	.72	.72	23,570 37
Westborough,	1903-6,	Southborough line,	Southwesterly,	2.27	2.27	
West Boylston,	1897-8,	Worcester line,	Northerly,	1.55	1.55	22,843 45
West Bridgewater,	1900-1-2-4,	Brookton line to Bridgewater line,	Southerly,	3.16	3.16	10,371 19
West Brookfield,	1899,	Ware line to Ware line,	Southwesterly, . . . . .	.15	.15	
West Brookfield,	1899-1900-1,	Brookfield line,	Northwesterly,	1.51	1.51	23,365 60
West Brookfield,	1905,	Warren line,	Easterly,	1.02	1.02	

¹ Exclusive of 1,500 feet at railroad crossing and Concord River.

TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED FOR BY THE COMMISSION, ETC. — *Concluded.*

TOWN OR CITY.	Year.	ROAD LAID OUT.			Length constructed (Miles).	Construction Expenditures to Dec. 1, 1911.
		From —	Direction.	Length (Miles).		
Westfield, . . .	1894-6-8-9, . . .	West Springfield line, . . .	Westerly, . . .	2.22	2.22	\$46,013 06
Westfield, . . .	1898-9-1900-1-2, . . .	Russell line, . . .	Easterly, . . .	3.59	3.59	
Westford, . . .	1902-3, . . .	Littleton line, . . .	Northerly, . . .	3.25	3.25	6,473 42
Westminster, . . .	1894-5-6-7-8-9, . . .	Fitchburg line, . . .	Southwesterly, . . .	3.00	3.00	
Westminster, . . .	1903, . . .	Gardner line, . . .	Easterly, . . .	2.25	2.25	55,134 80
West Newbury, . . .	1895-6-7-1903-4-5-6-9, . . .	Newburyport line to Groveland line, . . .	Westerly, . . .	5.09	5.09	
Weston, . . .	1898-9, . . .	Wayland line to near Stony Brook, . . .	Easterly, . . .	3.15	3.15	16,209 94
Westport, . . .	1894-6-7-8, . . .	Dartmouth line, . . .	Westerly, . . .	4.25	4.25	
West Springfield, . . .	1895-6, . . .	Tatham Hill, . . .	Easterly and westerly, . . .	1.91	1.91	19,732 13
West Tisbury, . . .	1895-6-7-1904, . . .	Tisbury line to Chilmark line, . . .	Southwesterly, . . .	5.35	5.35	
Westwood, . . .	1899-1900, . . .	Norwood line to Dedham line, . . .	Northerly, . . .	1.05	1.05	8,067 66
Weymouth, . . .	1894, . . .	Holbrook line to Abington line, . . .	Easterly, . . .	.25	.25	
Weymouth, . . .	1895-6-7, . . .	Fore River to Back River, . . .	Easterly, . . .	1.75	1.75	45,278 79
Weymouth, . . .	1903-4-7-8-10, . . .	Broad Street via Washington to Abington line, . . .	Southerly, . . .	4.94	4.94	
Whately, ¹ . . .	1899-1901-2-3-4-5-6, . . .	Deerfield line to Hatfield line, . . .	Southerly, . . .	3.89	3.89	35,192 71
Whitman, . . .	1894-5-6, . . .	Brookton line, . . .	Easterly, . . .	1.70	1.70	
Wilbraham, ² . . .	1894-5-6-1901-3-4, . . .	Springfield line to Palmer line, . . .	Easterly, . . .	4.82	4.82	49,263 51
Williamsburg, . . .	1896-8-1901-3, . . .	Goshen line, . . .	Southeasterly, . . .	2.65	2.65	

Williamstown,	1907,	River Road from village,	Southerly,	.13	.13	35,057 84
Williamstown,	1895-6-8-1903,	North Adams line,	Westerly,	1.95	1.95	
Wilmington,	1907-8-10,	Tewksbury line,	Southerly,	1.88	1.88	
Wilmington,	1910,	Near Boston & Maine Railroad depot,	Southerly,	.40	.40	37,755 76
Wilmington, ³	1911,	Woburn line,	Northerly,	1.41	1.41	
Winchendon,	1907,	Glen Allen Road via Maple Street,	Southwesterly,	1.35	1.35	9,323 30
Winchendon,	1907,	Millers River bridge, River Street,	Southwesterly,	.35	.35	
Winchester,	1899-1900,	Arlington line to Woburn line,	Northeasterly,	1.96	1.96	12,091 71
Windsor,	1897-1902-3,	Cummington line,	Westerly,	.98	.98	21,051 03
Windsor,	1906-7,	Peru Street via Main Road,	Southeasterly,	.88	.88	
Woburn,	1900-1-2,	Winchester line to Burlington line,	Northwesterly,	2.03	2.03	13,765 91
Worcester,	1896-7,	Paxton line,	Southeasterly,	1.35	1.35	
Worcester,	1897-1903,	Holden line,	Southerly,	1.50	1.50	47,328 89
Worcester,	1900-5,	West Boylston line,	Southerly,	1.22	1.22	
Wrentham,	1899-1900-1,	Plainville line,	Northerly,	2.23	2.23	45,729 15
Wrentham,	1897-8 1902,	Norfolk line,	Southeasterly,	1.86	1.86	
Yarmouth (north),	1894-5-6,	Barnstable line to Dennis line,	Easterly,	3.71	3.71	38,057 59
Yarmouth (south),	1895-6-7,	Barnstable line to Bass River bridge,	Easterly,	5.09	5.09	

³ Exclusive of 300 feet at railroad bridge.¹ Exclusive of 375 feet at railroad crossing and 800 feet at railroad bridge.² Exclusive of 1,703 feet at North Wilbraham village.

APPENDIX G.

TABLE SHOWING TOWNS AND CITIES IN WHICH WORK HAS BEEN DONE DURING THE YEAR 1911, AND THE RESIDENT ENGINEERS ON SUCH WORK, TOGETHER WITH DATES OF BEGINNING AND ENDING.

Town or City.	County.	Lay-out.	Resident Engineer.	Date of Contract.	Date of Beginning.	Date of Ending.
Abington,	Plymouth,	1911,	W. M. Stodder,	June 27, 1911	Aug. 2	Nov. 8
Agawam,	Hampden,	1911,	E. S. Bingham, E. R. Hyde,	April 6, 1911	April 19	Aug. 21
Ashburnham,	Worcester,	1911,	B. E. Gray,	Sept. 19, 1911	Oct. 30	Dec. 30
Ashby,	Middlesex,	1911,	C. H. Norton,	Sept. 5, 1911	Sept. 18	Nov. 15
Ashby,	Middlesex,	1910,	C. H. Norton,	Aug. 23, 1910	May 1	Oct. 14
Ashby,	Middlesex,	Surfacing,	E. N. Briggs,	July 18, 1911	Aug. 1	Sept. 16
Athol,	Worcester,	Surfacing,	H. M. McCue,	June 13, 1911	Aug. 7	Oct. 11
Attleborough,	Bristol,	Surfacing,	C. M. Upham,	April 4, 1911	May 5	June 24
Barnstable,	Barnstable,	1911,	A. T. Edwards,	May 23, 1911	June 1	Aug. 19
Barre,	Worcester,	-	C. H. Lovejoy,	Aug. 22, 1911	Sept. 1	Nov. 23
Barnardston,	Franklin,	1911,	C. H. Lovejoy,	April 4, 1911	April 24	Aug. 3
Bourne,	Barnstable,	1911,	H. O. Parker,	June 6, 1911	June 13	Sept. 9
Charlton,	Worcester,	1910,	L. T. C. Loring,	Sept. 27, 1910	June 26	Sept. 19
Charlton,	Worcester,	1911,	L. T. C. Loring,	April 18, 1911	June 26	Sept. 11
Chelmsford,	Middlesex,	1911,	R. W. Coburn, D. H. Dickinson,	Aug. 1, 1911	Aug. 17	Dec. 22

TABLE SHOWING TOWNS AND CITIES IN WHICH WORK HAS BEEN DONE, ETC. — *Concluded.*

Town or City.	County.	Lay-out.	Resident Engineer.	Date of Contract.	Date of Beginning.	Date of Ending.
Holliston,	Middlesex,	1910,	F. D. Sabin,	July 25, 1911	April 6	May 20
Holyoke,	Hampden,	Surfacing,	W. N. Seecord,	May 31, 1911	July 12	Sept. 19
Ipswich,	Essex,	1911,	F. H. Morris,	June 13, 1911	June 13	Sept. 7
Lakeville,	Plymouth,	1910,	W. G. Addis,	Aug. 16, 1910	April 7	June 16
Lakeville,	Plymouth,	1911,	W. G. Addis,	July 27, 1911	Aug. 14	Nov. 9
Lanesborough,	Berkshire,	1911,	G. R. Brown,	April 20, 1911	May 1	Sept. 16
Lee-Lenox,	Berkshire,	Surfacing,	G. N. Willis,	July 11, 1911	July 24	Sept. 7
Lenox,	Berkshire,	Surfacing,	G. N. Willis,	Aug. 30, 1911	Sept. 5	Oct. 26
Marblehead,	Essex,	Chapter 678,	P. H. Everett,	July 28, 1910	Jan. 1	May 27
Marblehead,	Essex,	Chapter 678,	G. H. Delano,	July 23, 1910	April 1	May 27
Mashpee,	Barnstable,	1911,	Chas. M. Upham,	June 20, 1911	June 30	Nov. 22
Milford,	Worcester,	1910,	F. D. Sabin,	Aug. 23, 1910	May 11	June 10
Montague,	Franklin,	Surfacing,	H. M. McCue,	June 13, 1911	June 29	Sept. 14
North Adams,	Berkshire,	1910,	Edw. R. Hyde,	June 13, 1911	July 19	Oct. 27
North Andover,	Essex,	1911,	D. H. Dickinson,	July 11, 1911	July 24	Dec. 6
Northborough,	Worcester,	1911,	L. T. C. Loring,	Aug. 29, 1911	Sept. 4	Nov. 1
Northborough,	Worcester,	-	L. T. C. Loring,	Sept. 27, 1911	Sept. 28	Oct. 26
North Reading,	Middlesex,	1911,	M. W. Fisher,	July 25, 1911	Oct. 26	Nov. 18

Palmer,	Hampden,	Surfacing,	A. D. Dady,	May 9, 1911	May 10	May 27
Pepperell,	Middlesex,	1911,	H. M. Davis, E. N. Briggs,	June 13, 1911	June 20	Oct. 23
Phillipston,	Worcester,	Surfacing,	H. M. McCue,	June 13, 1911	Aug. 7	Oct. 11
Pittsfield,	Berkshire,	Surfacing,	G. R. Brown,	July 11, 1911	July 29	Oct. 3
Plainville,	Norfolk,	1911,	Chas. E. Norwood,	July 11, 1911	July 26	Oct. 6
Plymouth,	Plymouth,	1911,	Wm. M. Stodder,	Aug. 15, 1911	Sept. 5	Dec. 30
Rockport,	Essex,	1910,	F. H. Morris,	Sept. 13, 1910	April 21	Aug. 3
Rowley,	Essex,	1911,	F. H. Morris,	Aug. 22, 1911	Aug. 30	Nov. 11
Salisbury,	Essex,	1911,	F. H. Morris,	Sept. 20, 1911	Sept. 23	Dec. 7
Sandwich,	Barnstable,	1910,	A. T. Edwards,	Aug. 30, 1910	April 19	June 7
Seekonk,	Bristol,	1910,	W. G. Addis,	Oct. 3, 1910	June 14	Aug. 5
Somerset,	Bristol,	1910,	W. G. Addis,	July 26, 1910	May 1	May 17
South Hadley,	Hampshire,	Surfacing,	W. G. Burns,	June 13, 1911	June 19	Aug. 7
Spencer (bridge),	Worcester,	1911, bridge,	L. T. C. Loring,	Sept. 12, 1911	Sept. 18	Nov. 13
Swansea,	Bristol,	1911,	H. O. Parker,	July 25, 1911	Aug. 5	Nov. 15
Townsend,	Middlesex,	1910,	C. H. Norton,	Aug. 23, 1910	May 1	Oct. 14
Townsend (bridge),	Middlesex,	1911, bridge,	C. H. Norton,	April 18, 1911	May 25	Sept. 18
Tyngsborough,	Middlesex,	1911,	D. H. Dickinson,	April 11, 1911	April 26	July 22
Walpole,	Norfolk,	1911, bridge,	E. J. Nichols,	Aug. 30, 1911	Sept. 14	Dec. 2
Webster,	Worcester,	1911,	L. T. C. Loring,	Sept. 12, 1911	Oct. 25	Nov. 23
Weymouth,	Norfolk,	1910,	W. M. Stodder,	June 27, 1911	Aug. 7	Nov. 8
Williamstown,	Berkshire,	Surfacing,	Edw. R. Hyde,	June 13, 1911	July 19	Oct. 29
Wilmington,	Middlesex,	1911,	D. H. Dickinson,	April 11, 1911	April 14	July 22

APPENDIX H.

SHOWING CONTRACT PRICES ON

TOWN OR CITY.	Contract Number.	Contractor.	BITUMINOUS SURFACING.		EXCAVATION.			Con- Portland Cement crete Masonry.
			Oil (Square Yard).	Tar (Square Yard).	All Kinds (Cubic Yard).	Borrow (Cubic Yard).	Ledge (Cubic Yard).	
Abington-Weymouth, . . .	1445	Carchia Bros. Construc- tion Company.	-	-	\$0 45	\$0 73	\$1 00	\$10 00
Agawam,	1420	Cordner & Montague, .	\$0 20	-	40	75	5 00	7 00
Ashburnham,	1474	Francis J. Mague, .	-	-	50	70	1 50	9 00
Ashby,	1455	Francis J. Mague, .	-	-	-	-	-	-
Ashby,	1471	David H. Damon, .	-	-	55	30	2 25	8 00
Attleborough,	1418	Charles E. Horne, .	20	-	80	75	-	-
Athol-Phillipston, . .	1437	Charles E. Horne, .	\$16	\$80 06½	2 00	-	-	-
Barnstable,	1431	Edward J. Rourke, .	-	-	40	55	2 00	9 00
Barre,	1465	P. F. Giovannini & Co.,	-	-	50	60	2 00	10 00
Bernardston,	1419	R. H. Newell & Co., .	\$65	-	50	50	2 00	8 00
Bourne,	1433	M. J. Denault Com- pany.	-	-	40	50	1 00	7 50
Charlton,	1425	Richmond F. Hudson, .	-	-	50	70	1 50	8 00
Chelmsford,	1461	De Stefano & Di Chris- toforo.	1168	-	47	90	2 50	8 00
Chester,	1460	P. F. Giovannini, .	\$07	-	-	-	-	-
Chester,	1428	P. F. Giovannini, .	-	-	1 00	-	-	15 50
Chester,	1421	P. F. Giovannini, .	-	-	40	50	1 50	8 25
Chilmark,	1430	Town of Chilmark, .	12-	-	-	-	-	-
Deerfield,	1480	Lane Construction Cor- poration.	-	-	60	65	-	1415 00
Deerfield,	-	Lane Construction Cor- poration.	-	-	60	65	-	-
Dighton,	1449	Herbert E. Cushing, .	\$05½	-	50	60	2 00	10 00
Egremont,	-	Caesar A. Rossi, .	\$15	-	38	55	1 70	8 00
Erving,	1476	Francis J. Mague, .	\$10	\$70	50	70	1 50	9 00
Fitchburg,	1442	New England Contract- ing Company.	\$16	\$08	1 40	-	-	-
Franklin,	1478	Town of Franklin, .	\$1 00	-	50	60	2 00	9 00

¹ Fifteen-inch clay pipe.

² Ten-inch clay pipe.

³ Fifteen-inch iron pipe.

⁴ Including sand.

⁵ Exclusive of asphaltic oil.

⁶ Eight-inch clay pipe.

⁷ Sixteen-inch iron pipe.

⁸ Gravel per cubic yard.

APPENDIX H.

STATE ROADS DURING 1911.

BROKEN STONE.		PIPE CULVERTS (PER LINEAL FOOT).						Fencing (Lineal Foot).	Side Drains (Lineal Foot).	Stone Filling for Under-drains (per Cubic Yard).	Bounds (Each).	Catch-basins (Each).
Local (Ton).	Trap (Ton).	CLAY.			IRON.							
		Twelve-inch.	Eighteen-inch.	Twenty-four-inch.	Twelve-inch.	Eighteen-inch.	Twenty-four-inch.					
\$1 45	-	\$0 60	\$1 50	\$1 00	\$0 50	-	-	\$0 30	-	-	\$2 00	-
-	\$2 20	-	-	-	1 50	-	-	20	-	-	60	\$15 00
1 55	-	-	-	-	2 50	-	-	30	-	\$0 80	2 00	-
1 69	-	-	-	-	-	-	-	-	-	-	-	-
1 69	-	75	11 00	-	2 25	\$2 50	-	30	-	78	2 00	-
-	2 32	-	-	-	-	-	-	-	-	90	-	-
1 88	-	-	-	-	-	-	-	-	-	-	-	-
1 75	-	645	255	-	-	-	-	30	-	1 00	1 50	25 00
1 40	-	-	-	-	2 50	72 59	-	30	-	1 00	-	-
-	-	-	-	-	1 75	-	-	25	-	-	2 00	-
-	2 41	56	248	640	-	-	-	30	\$0 50	1060	1 50	30 00
1 40	-	70	1 00	-	-	-	-	30	-	75	2 00	-
-	-	60	80	-	-	-	-	25	-	-	2 00	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	122 75	-	-
-	1 85	-	1 25	-	-	2 90	-	27	-	90	1 50	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	2 25	-	-	-	-	-	-	-	-	-	-	-
-	2 25	-	-	-	-	-	-	-	-	-	-	-
1 40	-	80	1 75	670	151 40	-	-	35	-	95	2 00	30 00
-	1 35	-	-	-	2 00	-	-	35	-	-	5 00	-
1 55	-	-	-	-	-	32 50	-	30	-	162 50	2 00	-
-	2 10	-	-	-	-	-	-	-	-	-	-	-
-	-	75	-	-	2 00	3 00	-	30	-	90	2 00	35 00

⁹ Cobblestone gutters per square yard.¹⁰ Clay.¹¹ Gravel surfacing per cubic yard.¹² Rock embankment.¹³ Lump sum contract, \$5,000.¹⁴ Including cement and steel rods.¹⁵ Eight-inch iron pipe.¹⁶ Stone masonry.

SHOWING CONTRACT PRICES ON

TOWN OR CITY.	Contract Number.	Contractor.	BITUMINOUS SURFACING.		EXCAVATION.			Con- crete Masonry.
			Oil (Square Yard).	Tar (Square Yard).	All Kinds (Cubic Yard).	Borrow (Cubic Yard).	Ledge (Cubic Yard).	
Granby, . . .	1422	Charles E. Horne, .	-	-	\$0 49	\$0 65	\$2 00	\$10 00
Greenfield, . . .	1481	Richmond F. Hudson, .	-	-	60	60	2 25	14 00
Hadley, . . .	1462	Francis J. Mague, .	\$0 06 ¹	-	60	70	-	-
Hancock, . . .	1734	Crowe & Walsh, .	\$0 08	\$0 08	65	75	1 50	7 50
Hatfield, . . .	1456	Bush, Moller & Smith,	-	\$0 83	36	58	2 10	8 00
Hatfield, . . .	1467	Lane Construction Cor- poration.	\$0 06	-	-	-	-	-
Holliston, . . .	1457	Bush, Moller & Smith,	\$ 7153	484	58	70	2 16	8 00
Holyoke, . . .	1432	Herbert L. Thomas, .	\$0 06	\$0 10	-	-	-	-
Ipswich, . . .	1436	James E. Watkins, .	32 ¹	-	50	65	1 75	9 50
Lakeville, . . .	1446	Town of Lakeville, .	\$0 07	475	50	55	2 00	10 00
Lanesborough, . . .	1427	Michael L. Camarco, .	16	-	41	63	2 00	9 50
Lee-Lenox, . . .	1450	Herbert L. Thomas, .	\$0 8 ¹	\$0 20	-	-	-	-
Marlborough, . . .	1479	City of Marlborough, .	711	-	55	50	2 00	12 50
Mashpee, . . .	1444	Lane Quarry Company,	-	\$0 25	40	55	1 00	8 00
Montague, . . .	1438	Charles E. Horne, .	\$0 59	-	-	-	-	-
North Andover, . . .	1453	Rowe Contracting Com- pany.	\$15	-	45	80	3 00	10 50
North Adams-Williams- town.	1439	Francis J. Mague, .	\$12	\$0 6 ¹	\$1 00	70	\$0 14	10 00
Northborough, . . .	-	Richmond F. Hudson, .	20	-	60	1 00	2 00	-
Northborough, . . .	1468	Richmond F. Hudson, .	\$20	-	60	1 00	2 00	10 00
North Reading, . . .	1458	Town of North Reading,	-	-	65	50	-	-
Palmer, . . .	1429	New England Contract- ing Company.	\$0 5 ¹	-	-	-	-	-
Pepperell, . . .	1435	Hub Construction Com- pany.	-	-	55	60	1 75	9 00
Pittsfield, . . .	1454	William R. Pratt, .	\$0 8	\$11	50	1 00	\$0 08	-
Plainville, . . .	1447	Thomas Whalen & Co.,	\$13	-	70	60	1 00	8 00
Plymouth, . . .	1464	Carchia Bros. Construc- tion Company.	\$33	-	42	1 00	1 00	10 00
Rowley, . . .	1466	Timothy A. Moyuahan,	\$0 8	-	60	1 05	1 50	6 00
South Hadley, . . .	1440	Lane Construction Cor- poration.	\$15	\$0 7	75	-	-	-
Salisbury, . . .	1475	Town of Salisbury, .	\$14	-	50	50	2 00	\$18 00 10 00
Seekonk, . . .	1477	Town of Seekonk, .	\$0 6	-	50	55	-	9 00
Spencer, . . .	1472	R. L. Whipple & Co., .	-	-	1 25	50	-	14 50

¹ Including cement and steel rods.² Sixteen-inch iron pipe.³ Stone fencing.⁴ Gravel per cubic yard.⁵ Exclusive of asphaltic oil.⁶ Exclusive of tar.⁷ Per gallon.⁸ Fifteen-inch clay pipe.⁹ Exclusive of bituminous material.¹⁰ Price per gallon of patching road surface.

STATE ROADS DURING 1911 — *Continued.*

BROKEN STONE.		PIPE CULVERTS (PER LINEAL FOOT).						Fencing (Lineal Foot).	Side Drains (Lineal Foot).	Stone Filling for Under- drains(perCubic Yard).	Bounds (Each).	Catch-basins (Each).
Local (Ton).	Trap (Ton).	CLAY.			IRON.							
		Twelve-inch.	Eighteen-inch.	Twenty-four-inch.	Twelve-inch.	Eighteen-inch.	Twenty-four-inch.					
\$1 49	-	-	-	-	-	-	-	\$0 35	-	-	\$2 20	-
-	-	-	-	-	\$1 10	\$1 40	-	30	-	\$1 00	-	-
1 00	\$2 40	-	-	-	-	-	-	-	-	-	-	-
1 55	-	-	-	-	2 25	3 00	\$2 75	-	-	1 00	-	-
-	2 16	\$0 72	-	-	2 40	-	-	36	-	-	1 80	\$30 00
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	84	\$1 92	\$1 32	-	-	-	36	-	88	1 80	-
-	2 20	-	-	-	-	-	-	-	-	-	-	-
-	-	57½	1 27½	-	-	-	-	30	-	472½	1 50	-
1 50	-	111 50	-	-	2 50	122 00	131 35	30	-	1 00	2 00	30 00
-	1 80	-	-	-	2 35	3 10	-	32	-	-	2 00	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	2 00	-	-	30	-	41 10	2 00	-
-	-	1160	-	-	-	-	-	30	-	141 00	2 00	30 00
-	2 44	-	-	-	-	-	-	-	-	-	-	-
-	2 10	50	870	-	-	-	-	30	-	480	2 00	30 00
-	2 38	-	-	-	-	-	-	-	-	161 00	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	2 20	70	1760	-	-	-	-	40	-	-	2 00	30 00
1 70	1375	-	-	-	-	-	-	30	1380 06	-	2 00	-
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	55	-	-	2 00	-	-	30	-	470	1 50	-
-	2 30	-	-	-	-	-	-	-	-	-	-	-
-	2 20	75	1160	-	-	-	-	30	-	75	2 00	30 00
-	-	111 00	-	-	-	-	-	30	-	-	2 25	-
-	1 95	70	890	1760	-	-	-	30	-	-	1 75	30 00
-	2 14	-	-	-	-	-	-	-	-	-	-	-
1 70	-	75	1 50	-	1 50	-	-	30	-	41 01	2 00	30 00
1 65	-	-	81 25	1770	-	-	-	30	-	470	1 50	-
-	3 00	-	-	-	-	-	-	50	-	-	-	-

¹¹ Eight-inch clay pipe.¹² Ten-inch iron pipe.¹³ Eight-inch iron pipe.¹⁴ Clay.¹⁵ Old stone.¹⁶ Culvert excavation.¹⁷ Ten-inch clay pipe.¹⁸ Resetting guard rail.¹⁹ Pipe ends.

SHOWING CONTRACT PRICES ON

TOWN OR CITY.	Contract Number.	Contractor.	BITUMINOUS SURFACING.		EXCAVATION.			Con- Portland Cement crete Masonry.
			Oil (Square Yard).	Tar (Square Yard).	All Kinds (Cubic Yard).	Borrow (Cubic Yard).	Ledge (Cubic Yard).	
Swansea, . . .	1459	Pietro F. Giovannini, .	\$0 07	-	\$0 50	\$0 65	\$2 00	\$10 00
Townsend, . . .	1426	David H. Damon, .	-	-	75	80	275	12 00
Tyngsborough, . . .	1424	Harvey W. Tarbell, .	23	-	45	55	2 00	9 00
Walpole, . . .	1469	Hapgood Frost Com- pany.	-	-	1 65	1 70	-	10 00
Webster, . . .	1473	Richmond F. Hudson, .	120	-	50	1 25	2 00	10 00
Whately, . . .	1441	Lane Construction Cor- poration.	113	-	1 00	-	-	-
Wilmington, . . .	1423	Town of Wilmington, .	20	-	60	50	1 50	10 00

¹ Exclusive of asphaltic oil.² Rock embankment.³ Iron pipe fence.

STATE ROADS DURING 1911 — *Concluded.*

BROKEN STONE.		PIPE CULVERTS (PER LINEAL FOOT).						Fencing (Lineal Foot).	Side Drains (Lineal Foot).	Stone Filling for Under- drains(per Cubic Yard).	Bounds (Each).	Catch-basins (Each).
Local (Ton).	Trap (Ton).	CLAY.			IRON.							
		Twelve-inch.	Eighteen-inch.	Twenty-four-inch.	Twelve-inch.	Eighteen-inch.	Twenty-four-inch.					
\$1 40	-	\$0 65	-	-	-	-	-	\$0 30	-	\$1 00	\$2 00	-
-	\$3 00	-	-	-	-	-	-	35	\$1 00	1 00	415 75	-
-	1 95	60	\$0 90	-	-	-	-	30	-	-	1 50	-
2 60	-	-	-	-	-	-	-	50	-	-	-	-
-	-	60	1 50	-	-	-	-	30	-	1 00	2 00	\$30 00
-	2 25	-	-	-	-	-	-	-	-	-	-	-
1 60	-	75	-	-	-	-	-	30	-	-	1 50	-

⁴ Spruce piles.⁵ Fifteen-inch clay pipe.

APPENDIX I.

STATEMENT OF CLAIMS AGAINST THE COMMISSION.

[As required by Section 5, Chapter 18 of the Revised Laws.]

NAME.	Residence.	Nature of Claim.
Bishop, Emeline, . . .	Rowley, . . .	Damages due to construction of State highway in Ipswich.
Coleman, Martin W., . .	Richmond, . . .	Damages due to construction of State highway in Richmond.
Cooper, Frederie P., . .	Attleborough, . .	Damages due to construction of State highway in Attleborough.
Donovan, John, . . .	Ipswich, . . .	Damages due to construction of State highway in Ipswich.
Flagg, Lucretia T., . .	Northampton, . .	Damages due to construction of State highway in Northampton.
Kinmond, John D., . . .	Boston, . . .	Damages due to accident alleged to have occurred on State highway in Salisbury.
McLaughlin, Nancy M., .	Dover, . . .	Damages due to construction of State highway in Dover.
Nourse, Joseph P., . . .	Marlborough, . .	Damages due to construction of State highway in Marlborough.
Perley, Osborne, . . .	Ipswich, . . .	Damages due to construction of State highway in Ipswich.
Reed, William H., . . .	Gloucester, . . .	Damages due to accident alleged to have occurred on State highway in Gloucester.
Seabury, Phœbe W., . .	Dartmouth, . . .	Damages due to construction of State highway in Dartmouth.
Taft, Kate P., . . .	Northampton, . .	Damages due to construction of State highway in Northampton.
Talbot, Joseph, . . .	Taunton, . . .	Damages due to construction of State highway in Taunton.

APPENDIX J.

MAINTENANCE.

Table showing the Amounts expended for Repair and Maintenance, the Cost per Mile for Maintenance during 1911, the Cost per Mile per Year on Each Road, the Number of Miles under Maintenance and the Amounts to be assessed upon Municipalities for Maintenance under Chapter 47 of the Revised Laws.

TOWN OR CITY.	AMOUNTS EXPENDED.						Total expended.	EXPENDED PER MILE IN 1911.			Cost per Mile per Year.	Length under Maintenance (Miles).	Amount to be assessed on Cities and Towns.
	REVENUE APPROPRIATION.			MOTOR VEHICLE FEES FUND.				From Revenue Appropriation.	From Motor Vehicle Fees Fund.	Total.			
	To 1911.	During 1911.	Total.	To 1911.	During 1911.	Total.							
Abington, . . .	\$1,483 09	\$265 19	\$1,748 28	-	\$50 40	\$50 40	\$1,798 68	\$78 69	\$74 95	\$93 64	\$71 38	3.37	\$168 50
Acton, . . .	3,548 21	673 19	4,221 40	\$3,112 68	60 20	3,172 88	7,394 28	125 12	11 19	136 31	81 23	5.38	269 00
Acushnet, . . .	4,928 90	211 26	5,140 16	-	-	-	5,140 16	61 95	-	61 95	19 60	3.41	170 50
Adams, . . .	1,567 71	2,403 42	3,971 13	-	1,504 45	1,504 45	5,475 58	1,188 95	741 10	1,925 05	316 68	2.03	101 50
Agawam, . . .	1,244 65	468 78	1,713 43	1,969 33	464 16	2,433 49	4,146 92	117 48	116 33	233 81	106 20	3.99	199 50
Amesbury, . . .	1,892 69	2,184 77	4,077 46	19 00	209 88	228 88	4,306 34	723 43	69 50	792 43	176 97	3.02	151 00
Amherst, . . .	1,031 37	167 42	1,198 79	1,530 74	-	1,530 74	2,729 53	172 59	-	172 59	133 20	.97	48 50
Andover, . . .	11,765 30	423 86	12,189 16	3,279 77	42 57	3,322 34	15,511 50	101 16	10 16	111 32	245 52	4.19	209 50
Ashby, . . .	7,372 07	2,726 83	10,098 90	19 25	1,525 85	1,545 10	11,644 00	673 29	376 75	1,050 04	196 59	4.05	202 50
Ashfield, . . .	3,106 32	120 38	3,226 70	220 59	38 52	259 11	3,485 81	74 77	23 92	98 69	153 29	1.61	80 50
Ashland, . . .	634 55	307 02	941 57	-	487 26	487 26	1,428 83	95 94	152 27	248 21	73 27	3.20	160 00

Table showing the Amounts expended for Repairs, Maintenance, etc. — Continued.

TOWN OR CITY.	AMOUNTS EXPENDED.						Total expended.	EXPENDED PER MILE IN 1911.			Cost per Mile under Maintenance per Year.	Length under Maintenance (Miles).	Amount to be assessed on Cities and Towns.
	REVENUE APPROPRIATION.			MOTOR VEHICLE FEES FUND.									
	During 1911.		Total.	To 1911.	During 1911.	Total.							
	To 1911.												
Athol, . . .	\$7,515 09	\$2,743 00	\$10,258 09	-	\$2,801 43	\$2,801 43	\$5,544 43	\$884 83	\$903 69	\$1,788 52	\$306 67	3.10	\$155 00
Attleborough, . .	4,543 64	486 23	5,029 87	\$1,603 15	6,603 76	8,206 91	13,236 78	143 43	1,948 01	2,091 44	180 48	3.39	109 50
Auburn, . . .	14,786 29	852 37	15,638 66	10,567 25	500 00	11,067 25	20,705 91	161 43	94 70	256 13	263 41	5.28	264 00
Barnstable, . . .	4,133 59	2,138 90	6,272 49	-	617 44	617 44	6,889 93	192 00	55 42	247 42	101 45	11.14	557 00
Barre, . . .	9,088 26	631 83	9,720 09	120 02	200 00	320 02	10,040 11	218 62	69 21	287 83	310 25	2.89	144 50
Becket, . . .	2,733 08	1,086 37	3,819 45	9,086 90	477 73	9,564 63	13,384 08	176 64	77 68	254 32	174 64	6.15	-
Bedford, . . .	1,007 56	395 24	1,402 80	1 99	3,457 24	3,459 23	4,862 03	239 54	2,095 29	2,334 83	940 85	1.65	82 50
Belchertown, . .	904 72	215 78	1,120 50	-	12 67	12 67	1,133 17	91 82	5 37	97 19	64 51	2.35	117 50
Bellingham, . .	828 35	174 10	1,002 45	50 60	1,309 71	1,360 31	2,362 76	54 75	411 85	466 60	529 50	3.18	159 00
Berkley, . . .	210 12	125 69	335 81	-	33 00	33 00	368 81	163 23	42 86	205 09	87 22	.77	38 50
Bernardston, . .	-	217 71	217 71	-	-	-	217 71	80 63	-	80 63	241 90	2.70	135 00
Beverly, . . .	14,855 15	3,045 89	17,901 04	14,103 42	1,360 89	15,464 31	33,365 35	536 25	239 59	775 84	346 28	5.68	284 00
Billerica, . . .	360 87	70 30	431 17	316 38	152 76	469 14	900 31	121 20	263 38	334 58	307 98	.58	29 00
Blackstone, . .	1,819 79	410 07	2,229 86	25 21	2,012 88	2,038 09	4,267 95	157 11	771 22	928 33	114 41	2.61	130 50
Bourne, . . .	3,888 20	427 64	4,315 84	5,271 01	1,220 60	6,491 61	10,794 85	63 73	181 90	245 63	112 92	6.71	335 50
Boston, . . .	870 89	312 26	1,183 15	-	87 93	87 93	1,271 08	223 04	62 81	285 85	350 04	1.40	70 00
Dorchester, . .	1,475 01	447 02	1,922 03	-	44 76	44 76	1,966 79	135 05	13 52	148 57	71 16	3.31	165 50

Braintree,	749 04	219 77	968 81	-	27 88	27 88	996 69	207 33	26 30	233 63	94 70	1 06	53 00
Brewster,	6,936 51	835 03	7,794 54	-	92 55	92 55	7,837 09	109 72	11 83	121 55	85 29	7 82	391 00
Bridgewater,	3,166 79	560 81	3,727 60	50 14	774 61	824 75	4,552 35	161 61	223 23	384 84	66 03	3 47	173 50
Brinfield,	2,240 72	491 38	2,732 10	5,822 49	1,009 41	6,831 90	9,564 00	123 77	254 26	378 03	61 23	3 97	198 50
Brookton,	3,365 18	270 83	3,636 01	3,995 23	273 66	4,268 89	7,904 90	84 89	85 79	170 68	102 22	3 19	159 50
Brookfield,	6,773 97	1,080 86	7,854 83	597 24	561 80	1,159 04	8,993 87	272 71	144 42	417 13	223 79	3 89	194 50
Buckland,	6,320 10	560 66	6,880 76	4,361 48	278 21	4,639 69	11,520 45	130 99	65 00	185 99	136 14	4 28	214 00
Burlington,	2,522 22	670 43	3,193 65	2,137 75	193 59	2,331 34	5,524 99	176 43	50 94	227 37	127 29	3 80	190 00
Canton,	3,343 80	409 26	3,753 06	2,082 82	518 77	2,601 59	6,354 65	126 70	160 61	287 31	258 83	3 23	161 50
Charlemont,	4,614 76	265 08	4,879 84	-	-	-	4,879 84	344 26	-	344 26	478 42	.77	38 50
Charlton,	2,267 27	267 34	2,534 61	43 81	5 12	48 93	2,533 54	55 35	1 06	56 41	104 13	4 83	236 50
Chatham,	2,571 14	755 88	3,327 02	-	95 91	95 91	3,422 93	105 42	13 37	118 79	76 51	7 17	353 50
Chelmsford,	2,991 65	617 71	3,609 36	20	1,496 77	1,496 97	5,106 33	132 27	320 51	452 78	113 00	4 67	233 50
Chelsea,	834 52	1,435 69	2,270 21	9 00	2,327 53	2,336 53	4,606 74	1,495 51	2,424 51	3,920 02	291 42	.96	48 00
Cheshire,	4,078 72	1,742 30	5,821 02	-	65 52	65 52	5,886 54	415 82	15 64	431 46	202 69	4 19	209 50
Chester,	3,826 95	576 76	4,403 71	-	191 59	191 59	4,595 30	87 12	28 94	116 06	144 01	6 62	331 00
Chicopee,	12,470 01	2,315 17	14,785 18	939 77	63 00	1,002 77	15,787 95	595 16	16 19	611 35	380 00	3 89	194 50
Chilmark,	690 27	268 70	958 97	-	35 00	35 00	993 97	53 84	7 02	60 86	43 91	4 99	249 50
Clarksburg,	1,391 16	101 46	1,492 62	-	10 46	10 46	1,503 03	93 08	9 59	102 67	320 99	1 09	54 50
Cohasset,	3,125 21	155 82	3,281 03	360 65	1,050 21	1,410 86	4,691 89	68 34	460 62	528 96	129 43	2 28	114 00
Colrain,	1,994 70	209 90	2,204 60	-	74 34	74 34	2,278 94	98 54	34 90	133 44	99 40	2 13	106 50
Concord,	8,443 06	855 43	9,298 49	2,539 63	86 08	2,625 71	11,924 20	233 28	23 97	262 25	245 29	3 59	179 50
Dalton,	6,012 72	888 71	6,871 43	-	-	-	6,871 43	335 43	-	335 43	221 66	2 56	128 00

Table showing the Amounts expended for Repairs, Maintenance, etc. — Continued.

TOWN OR CITY.	AMOUNTS EXPENDED.						EXPENDED PER MILE IN 1911.			Cost per Mile Mainte- nance per Year.	Length under Main- tenance (Miles).	Amount to be assessed on Cities and Towns.	
	REVENUE APPROPRIATION.			MOTOR VEHICLES FEES FUND.			Total ex- pend- ed.	From Revenue Approp- riation.	From Motor Vehicle Fees Fund.				Total.
	To 1911.		Total.	To 1911.		Total.							
	To 1911.	During 1911.		To 1911.	During 1911.								
Dartmouth, . . .	\$4,921 71	\$503 94	\$5,425 65	\$1,941 18	\$8,833 55	\$10,774 73	\$16,200 38	\$111 00	\$1,945 71	\$2,056 71	\$129 09	4.54	\$227 00
Dedham, . . .	3 84	1 81	5 65	-	1 93	1 93	7 58	60 33	64 33	124 66	80 71	.03	1 50
Deerfield, . . .	8,398 14	1,119 58	9,517 72	1,817 64	318 11	2,135 75	11,653 47	153 58	43 63	197 21	189 82	7.29	364 50
Dennis, . . .	6,080 28	781 71	6,861 99	-	579 06	579 06	7,441 05	104 23	77 20	181 43	77 99	7.50	375 00
Dighton, . . .	963 94	1,024 62	1,988 56	1,781 03	1,303 29	3,084 32	5,072 88	264 76	336 76	601 52	108 61	3.87	193 50
Douglas, . . .	1,206 36	109 11	1,405 47	2,145 05	3,412 63	5,557 68	6,963 15	93 48	1,602 17	1,695 65	91 68	2.13	106 50
Dover, . . .	778 59	541 84	1,320 43	80	96	1 76	1,322 19	248 55	44	248 99	140 47	2.18	109 00
Dracut, . . .	617 84	56 58	674 42	-	55	55	674 97	30 91	30	31 21	80 00	1.83	56 58
Dudley, . . .	2,329 70	363 40	2,693 10	-	-	-	2,693 10	153 69	-	158 69	197 15	2.29	114 50
Duxbury, . . .	5,269 20	2,098 23	7,367 43	9 50	626 39	635 89	8,003 32	406 63	121 39	528 02	163 39	5.16	258 00
East Longmeadow, . . .	313 89	356 11	670 00	-	-	-	670 00	197 83	-	197 83	86 01	1.80	90 00
Eastham, . . .	3,072 89	414 18	3,487 07	2 16	10 02	12 18	3,499 25	64 11	1 55	65 66	175 76	6.46	323 00
Easthampton, . . .	2,774 54	528 36	3,302 90	-	328 75	328 75	3,631 65	218 33	135 84	354 17	103 38	2.42	121 00
Easton, . . .	644 48	61 91	706 39	5,806 50	72 50	5,879 00	6,585 39	77 38	90 63	168 01	80 55	.80	40 00
Edgartown, . . .	3,625 66	126 45	3,752 11	249 74	230 02	479 76	4,231 87	52 25	95 05	147 30	143 95	2.42	121 00
Erving, . . .	2,773 42	838 77	3,612 19	62 28	118 31	180 59	3,792 78	158 26	22 32	180 58	126 96	5.30	265 00
Essex, . . .	3,290 52	68 27	3,358 79	262 73	360 29	623 02	3,981 81	195 06	1,029 40	1,224 46	1,162 21	.35	17 50

Fairhaven,	1,285 42	123 90 ¹	1,409 32	-	2,542 07	2,542 07	3,951 39	85 45	1,753 15	1,833 00	60 10	1.45	72 50
Falmouth,	6,414 64	3,867 63	10,272 27	14 32	4,123 39	4,137 71	14,409 98	247 92	264 99	512 91	113 17	15.56	778 00
Fitchburg,	6,348 92	882 91	7,231 83	2,278 02	2,548 97	4,826 99	12,083 82	214 30	613 68	832 98	158 32	4.12	206 00
Foxborough,	947 54	437 10	1,384 64	-	76 17	76 17	1,460 81	124 53	21 70	146 23	569 34	3.51	175 50
Framingham,	677 94	1,061 97	1,739 91	40	4,122 76	4,123 16	5,863 07	330 83	1,284 35	1,615 18	116 07	3.21	160 50
Franklin,	430 02	341 34	771 36	40	-	40	771 76	132 30	-	132 30	107 13	2.58	129 00
Freetown,	1,820 24	258 37	2,078 61	-	173 57	173 57	2,252 18	66 76	44 85	111 61	73 01	3.87	193 50
Gardner,	4,644 19	713 15	5,357 34	610 17	274 97	885 14	6,242 48	212 24	81 84	294 08	128 38	3.36	168 00
Gloucester,	17,595 32	1,319 87	18,915 19	5,911 37	753 14	6,669 51	25,584 70	331 62	190 49	522 11	446 43	3.98	199 00
Goshen,	6,241 86	54 69	6,296 55	-	7 19	7 19	6,303 74	22 23	2 92	25 15	197 32	2.46	54 69
Grafton,	4,131 50	618 24	4,749 74	3,157 45	2,691 69	5,849 14	10,598 88	301 58	1,313 02	1,614 60	212 42	2.05	102 50
Granby,	5,686 04	197 34	5,883 38	112 37	-	112 37	5,995 75	52 48	-	52 48	284 91	3.76	188 00
Great Barrington,	11,922 55	686 66	12,609 21	1,528 70	122 64	1,651 34	14,260 55	201 37	35 96	237 33	271 17	3.41	170 50
Greenfield,	1,726 65	343 12	2,069 77	-	58 43	58 43	2,128 20	64 01	10 90	74 91	76 57	5.36	268 00
Groton,	636 64	226 02	862 66	25 00	120 75	145 75	1,008 41	160 29	85 64	245 93	69 07	1.41	70 50
Groveland,	1,686 33	287 07	1,973 40	1,744 29	50 38	1,794 67	3,768 07	166 90	29 29	196 19	133 61	1.72	86 00
Hadley,	10,213 68	1,236 79	1,450 47	4,691 54	2,137 20	6,828 74	13,279 21	263 71	455 69	719 40	27 00	4.69	234 50
Hamilton,	3,031 22	791 96	3,823 18	992 89	1 20	994 09	4,817 27	297 73	45	298 18	206 44	2.66	133 00
Hancock,	9,858 82	10,174 99	20,033 81	-	6,412 79	6,412 79	26,420 23	3,150 15	1,985 38	5,135 53	460 79	3.23	161 50
Hanover,	849 84	219 31	1,069 15	-	23 00	23 00	1,092 15	118 54	12 43	130 97	148 08	1.85	92 50
Hardwick,	1,100 22	210 37	1,310 59	-	-	-	1,310 59	256 54	-	256 54	136 42	.82	41 00
Harvard,	651 81	139 45	791 26	-	-	-	791 26	60 36	-	60 36	60 31	2.31	115 50
Harwich,	4,306 03	989 79	5,385 82	-	356 93	356 93	5,742 75	152 74	55 98	207 82	99 94	6.48	324 00

Leicester, . . .	23,272 42	3,232 24	26,504 66	13,907 82	966 40	14,874 22	41,378 88	663 70	198 44	862 14	305 65	4.87	243 50
Lenox, . . .	21,519 86	7,789 61	29,309 47	5,598 55	2,254 03	7,852 58	37,162 05	1,016 92	294 26	1,311 18	573 35	7.66	383 00
Leominster, . . .	1,300 20	320 15	1,620 35	-	42 10	42 10	1,662 45	146 86	19 31	*166 17	80 33	2.18	109 00
Lexington, . . .	11,920 73	461 60	12,382 33	7,975 41	2,957 02	10,932 43	23,314 76	107 60	689 28	796 88	212 82	4.29	214 50
Lincoln, . . .	6,752 37	349 11	7,101 48	3,246 73	14 99	3,261 72	10,363 20	169 47	7 28	176 75	231 62	2.06	103 00
Littleton, . . .	2,249 73	527 87	2,777 60	425 63	193 40	619 03	3,396 63	177 73	65 12	242 85	133 09	2.97	148 50
Lowell, . . .	14,852 44	656 51	15,508 95	215 66	884 90	1,100 56	16,609 51	285 44	384 74	670 18	489 24	2.30	115 00
Lunenburg, . . .	2,891 77	951 58	3,843 35	3,716 77	402 29	4,119 06	7,982 41	230 97	97 64	328 61	124 95	4.12	206 00
Lynn, . . .	7,787 30	248 64	8,035 94	4,888 25	810 39	5,698 64	13,784 58	276 27	900 43	1,176 70	1,442 71	.90	45 00
Mansfield, . . .	501 61	131 10	632 71	-	16 21	16 21	648 92	108 35	13 39	121 74	70 15	1.21	60 50
Marion, . . .	10,261 67	752 91	11,014 58	1,251 66	2,170 51	3,422 17	14,436 75	135 17	389 68	524 85	172 35	5.57	278 50
Marlborough, . . .	10,896 74	1,646 37	12,543 11	4,309 23	358 03	4,667 26	17,210 37	260 09	56 56	316 65	230 15	6.33	316 50
Marshfield, . . .	4,223 92	2,569 38	6,793 30	60 17	1,162 25	1,222 42	8,015 72	310 31	140 37	450 68	132 89	8.28	414 00
Mattapoisett, . . .	4,073 96	419 56	4,493 52	275 49	947 06	1,222 55	5,716 07	130 70	295 03	425 73	115 93	3.21	160 50
Medford, . . .	602 63	31 62	634 25	664 48	668 78	1,333 26	1,967 51	38 76	777 65	814 41	215 73	.86	31 62
Melrose, . . .	306 25	18 45	324 70	-	4 69	4 69	329 39	46 12	11 73	57 85	159 95	.40	18 45
Merrimac, . . .	1,908 73	655 72	2,564 45	10 96	949 52	980 48	3,524 93	294 04	425 79	719 83	107 12	2.23	111 50
Methuen, . . .	4,362 27	771 70	5,133 97	2,884 00	507 06	3,391 06	8,525 03	209 13	137 41	346 54	149 29	3.69	184 50
Middleborough, . . .	5,752 19	838 30	6,590 49	2,209 12	7,487 07	9,696 19	16,286 68	67 33	601 37	688 70	62 54	12.45	622 50
Millford, . . .	716 10	272 17	988 27	-	4,935 17	4,935 17	5,923 44	76 67	1,390 18	1,466 85	79 32	3.55	177 50
Millbury, . . .	1,801 89	495 11	2,297 00	1,246 33	2,955 04	4,201 37	6,498 37	166 14	991 62	1,157 76	99 09	2.98	149 00
Milton, . . .	3,529 01	102 42	3,631 43	-	98 07	98 07	3,729 50	117 72	112 72	230 44	383 47	.87	43 50
Monson, . . .	1,433 67	756 02	2,289 69	-	35 88	35 88	2,275 57	469 58	22 28	491 86	120 93	1.61	80 50

Table showing Amounts expended for Repairs, Maintenance, etc. — Continued.

TOWN OR CITY.	AMOUNTS EXPENDED.						Total expended.	EXPENDED PER MILE IN 1911.			Cost per Mile Maintained per Year.	Length under Maintenance (Miles).	Amount to be assessed on Cities and Towns.
	REVENUE APPROPRIATION.			MOTOR VEHICLE FEES FUND.									
	To 1911.		Total.	To 1911.		Total.		From Revenue Appropriation.	From Motor Vehicle Fees Fund.	Total.			
	To 1911.	During 1911.		To 1911.	During 1911.								
Montague, . .	\$2,018 27	\$2,519 22	\$4,537 49	\$9 28	\$4,719 92	\$4,729 20	\$9,266 69	\$439 65	\$823 72	\$1,263 37	\$127 10	5.73	\$286 50
Nantucket, . .	15,440 46	207 91	15,648 37	791 83	1,008 25	1,800 08	17,448 45	32 08	155 59	187 67	181 68	6.48	207 91
Natick, . . .	2,382 13	330 88	2,763 01	4,272 06	3,535 27	7,807 33	10,570 34	119 02	1,104 77	1,223 79	104 86	3.20	160 00
Needham, . .	735 72	233 23	968 95	456 11	1 71	457 82	1,426 77	114 89	84	115 73	66 27	2.03	101 50
New Braintree, .	237 80	62 71	300 51	-	-	-	300 51	156 77	-	156 77	75 51	.40	20 00
Newbury, . . .	7,685 18	885 76	8,570 94	4,454 87	371 44	4,826 31	13,397 25	209 40	87 81	297 21	233 03	4.23	211 50
Newburyport, .	7,436 62	169 01	7,605 63	2,077 06	9 24	2,086 30	9,691 93	96 59	5 28	101 87	328 25	1.75	87 50
Newton, . . .	148 99	63 33	212 32	1,510 54	1 21	1,511 75	1,724 07	61 48	1 18	62 66	20 43	1.03	51 50
Norfolk, . . .	2,113 90	559 74	2,708 64	3,148 36	330 37	3,478 73	6,187 37	386 03	227 84	613 87	90 05	1.45	72 50
North Adams, .	16,769 51	4,822 11	21,591 62	1,837 73	6,640 27	8,478 00	30,069 62	1,202 52	1,655 91	2,853 43	452 37	4.01	200 50
Northampton, .	5,360 13	222 86	5,582 99	1,116 96	40 00	1,156 96	6,739 95	109 78	19 70	129 48	128 31	2.03	101 50
North Andover, .	1,964 87	667 95	2,632 82	40	447 61	448 01	3,080 83	197 62	132 43	330 05	173 71	3.38	169 00
North Attleborough, .	4,481 52	460 13	4,941 65	13,812 58	589 92	14,402 50	19,344 15	127 81	163 87	291 68	92 80	3.60	180 00
Northborough, .	3,695 56	856 14	4,551 70	2,026 45	504 82	2,531 27	7,082 97	215 64	127 16	342 80	109 97	3.97	198 50
North Brookfield, .	510 90	313 24	824 14	-	34 25	34 25	858 39	139 22	15 22	154 44	94 30	2.25	112 50
Northfield, . .	1,139 22	216 49	1,355 71	-	-	-	1,355 71	186 63	-	186 63	128 63	1.16	58 00
North Reading, .	2,464 04	305 04	2,769 08	4,117 85	53 05	4,170 90	6,939 98	120 09	20 89	140 98	111 61	2.54	127 00

Norton, . . .	1,454 55	749 10	2,203 05	-	6 20	6 20	2,209 85	159 72	1 33	161 05	225 55	4.69	234 50
Norwood, . . .	8,881 42	256 88	9,138 30	2,378 26	311 42	2,689 68	11,827 98	125 31	151 91	277 22	316 42	2.05	102 50
Oak Bluffs, . . .	7,634 84	222 57	7,857 41	249 76	244 59	494 35	8,351 76	93 91	103 20	197 11	212 36	2.37	118 50
Orange, . . .	12,296 86	907 74	13,204 60	527 67	170 20	697 87	13,902 47	139 11	35 46	224 57	243 13	4.80	240 00
Orleans, . . .	1,998 67	606 92	2,605 59	2 95	281 49	284 44	2,890 03	129 13	59 89	139 02	74 70	4.70	235 00
Oxford, . . .	360 85	1,101 45	1,462 30	-	90 57	90 57	1,552 87	502 94	41 36	544 30	205 96	2.19	109 50
Palmer, . . .	7,317 30	4,816 14	12,133 44	5,878 02	6,746 08	12,624 10	24,757 54	48 55	68 01	116 56	228 14	9.92	496 00
Paxton, . . .	16,254 97	840 89	17,095 86	9,526 88	571 78	10,108 66	27,204 52	233 58	135 83	392 41	324 65	3.60	180 00
Pembroke, . . .	475 95	70 44	546 39	-	18 00	18 00	564 39	201 26	51 43	252 69	273 33	.35	17 50
Pepperell, . . .	-	155 22	155 22	-	-	-	155 22	187 01	-	187 01	126 19	.83	41 50
Phillipston, . . .	3,857 42	2,132 88	5,990 30	14 91	2,445 79	2,460 70	8,451 00	767 22	879 78	1,647 00	233 21	2.78	139 00
Pittsfield, . . .	22,080 12	8,483 15	30,563 27	254 74	3,077 33	3,332 07	32,895 34	1,211 88	439 62	1,651 50	518 81	7.00	350 00
Plainville, . . .	1,822 98	54 80	1,877 78	6,053 35	303 05	6,356 40	8,234 18	23 83	131 76	155 59	147 74	2.30	54 80
Plymouth, . . .	6,977 78	1,168 02	8,145 80	-	3,604 06	3,604 06	11,749 86	159 78	493 03	652 81	117 14	7.31	365 50
Princeton, . . .	1,106 37	274 01	1,380 38	132 60	384 38	566 98	1,947 36	122 87	172 37	295 24	63 47	2.23	111 50
Provincetown, . . .	856 19	796 69	1,652 88	-	1,092 90	1,092 90	2,745 78	724 26	993 55	1,717 81	174 91	1.10	55 00
Quincy, . . .	4,534 73	258 30	4,793 03	3,163 93	352 60	3,516 53	8,309 56	96 74	132 06	228 80	251 07	2.67	133 50
Randolph, . . .	1,060 62	146 09	1,206 71	3,363 87	421 26	3,785 13	4,991 84	76 89	221 72	298 61	96 69	1.90	95 00
Raynham, . . .	549 99	64 90	614 89	-	36 65	36 65	651 54	43 85	24 76	68 61	46 80	1.48	64 90
Reading, . . .	7,295 74	508 07	7,713 81	3,001 86	5 40	3,007 35	10,721 16	135 58	1 47	137 05	236 11	3.74	137 00
Rehoboth, . . .	2,627 16	779 99	3,407 15	1,503 99	4,324 82	5,828 81	9,295 96	129 35	717 22	846 57	71 62	6.03	301 50
Revere, . . .	5,309 87	632 95	5,942 82	9,786 88	489 21	10,276 09	16,218 91	506 36	331 37	897 73	336 65	1.25	62 50
Richmond, . . .	3,188 02	595 86	3,783 88	-	468 75	468 75	4,252 63	148 23	116 60	264 83	107 46	4.02	201 00

Table showing the Amounts expended for Repairs, Maintenance, etc. — Continued.

TOWN OR CITY.	AMOUNTS EXPENDED.						Total expended.	EXPENDED PER MILE IN 1911.			Cost per Mile maintained per Year.	Length under Maintenance (Miles).	Amount to be assessed on Cities and Towns.
	REVENUE APPROPRIATION.			MOTOR VEHICLE FEES FUND.									
	To 1911.		During 1911.	To 1911.		During 1911.		Total.					
	To 1911.	During 1911.		Total.	Total.								
Rochester,	\$2,537 41	\$297 81	\$2,835 22	-	\$315 88	\$315 88	\$3,151 10	\$482 67	\$511 96	\$994 63	\$66 06	6.17	\$297 81
Rockland,	1,041 99	259 73	1,301 72	-	31 62	31 62	1,333 34	110 53	13 45	123 98	82 02	2.35	117 50
Rockport,	410 14	121 48	531 62	\$1,023 98	586 34	1,610 32	2,141 94	75 93	366 46	442 39	85 75	1.00	80 00
Rowley,	1,718 07	1,007 51	2,725 58	64 95	285 27	350 22	3,075 80	347 42	98 36	445 78	301 84	2.90	145 00
Russell,	18,746 75	2,973 77	21,720 52	11,049 41	2,373 78	13,423 19	35,143 71	446 51	356 42	802 93	233 10	6.66	333 00
Rutland,	733 08	30 68	763 76	-	-	-	763 76	26 45	-	26 45	109 74	1.16	30 68
Salem,	602 87	165 32	768 19	1,872 03	1,809 43	3,681 46	3,449 65	118 08	1,292 45	1,410 53	195 97	1.40	70 00
Salisbury,	1,607 91	164 45	1,772 36	1,165 11	9 34	1,174 45	2,946 81	42 82	2 43	45 25	152 92	3.84	164 45
Sandwich,	5,183 30	531 09	5,714 39	-	16 75	16 75	5,731 14	123 22	3 88	127 10	161 76	4.31	215 50
Saugus,	5,616 18	714 25	6,330 43	20,835 33	1,967 03	22,802 36	29,132 79	399 02	1,098 89	1,497 91	327 15	1.79	89 50
Scituate,	6,273 41	610 19	6,883 60	100 00	553 94	653 94	7,537 54	113 62	103 16	216 78	180 62	5.37	268 50
Seekonk,	2,846 04	366 46	3,212 50	346 42	1,960 99	2,307 41	5,519 91	86 02	460 32	546 34	133 19	4.26	213 00
Sharon,	108 57	84 40	192 97	-	24 00	24 00	216 97	131 87	37 50	169 37	97 95	.64	32 00
Shelburne,	6,195 32	374 39	6,569 71	413 50	5 52	419 02	6,988 73	173 32	2 56	175 88	199 94	2.16	108 00
Shrewsbury,	15,649 38	1,662 15	17,311 53	14,688 25	5,855 33	20,543 58	37,855 11	342 00	1,204 80	1,546 80	292 08	4.86	243 00
Somerset,	6,571 90	1,547 02	8,118 92	10,589 60	5,561 63	16,151 23	24,270 15	193 38	695 20	888 58	108 31	8.00	400 00
Somerville,	1,052 17	143 64	1,195 81	998 22	1,001 02	1,999 24	3,195 05	123 82	862 95	986 77	348 63	1.16	58 00

Southampton, .	407 59	81 45	489 04	-	-	-	-	489 04	114 71	-	114 71	119 57	.71	35 50
Southborough, .	1,341 11	831 32	2,172 43	42 75	2,338 63	2,381 38	-	4,553 81	225 29	633 77	859 06	144 54	3.69	184 50
Southbridge, .	1,252 66	163 47	1,416 13	4 00	39 39	43 39	-	1,459 52	120 20	28 96	149 16	135 64	1.36	68 00
South Hadley, .	13,492 56	1,337 92	14,830 48	199 74	12,321 94	12,521 68	-	27,352 16	232 68	2,142 95	2,375 63	274 33	5.75	287 50
Spencer, .	5,825 13	2,039 25	7,864 38	1,286 87	1,900 27	3,187 14	-	11,051 52	673 02	627 15	1,300 17	359 75	3.03	151 50
Sterling, .	2,486 29	560 98	3,047 27	-	56 30	56 30	-	3,103 57	152 03	15 25	167 28	115 87	3.69	184 50
Stockbridge, .	3,368 97	1,157 46	4,526 43	610 25	207 42	817 67	-	5,344 10	350 74	62 86	413 60	379 10	3.30	165 00
Stoneham, .	6,163 80	552 89	6,716 69	1,727 14	1,963 01	3,690 15	-	10,406 84	349 93	1,242 41	1,592 34	365 43	1.58	79 00
Stoughton, .	3,910 29	229 56	4,139 85	824 23	483 80	1,308 03	-	5,447 88	69 56	146 61	216 17	179 08	3.30	165 00
Sturbridge, .	1,099 20	271 06	1,370 26	15 23	84 59	99 82	-	1,470 08	114 85	35 84	150 69	91 35	2.36	118 00
Sudbury, .	14,737 06	2,214 84	16,951 90	6,180 49	-	6,180 49	-	23,132 39	433 43	-	433 43	322 52	5.11	255 50
Sunderland, .	745 31	129 00	874 31	-	-	-	-	874 31	82 69	-	82 69	82 40	1.56	78 00
Sutton, .	2,829 12	2,316 78	3,145 90	941 69	1,533 21	2,474 90	-	5,620 80	138 93	672 46	811 39	143 52	2.28	114 00
Swampscott, .	4,585 57	171 09	4,756 66	1,486 48	2,006 07	3,492 55	-	8,249 21	114 82	1,346 36	1,461 18	260 21	1.49	74 50
Swansea, .	1,165 04	590 94	1,755 98	35 27	16 55	51 82	-	1,807 80	111 92	3 13	115 05	75 46	5.28	264 00
Taunton, .	4,918 44	380 32	5,298 76	52 23	110 93	163 16	-	5,461 92	81 44	23 75	105 19	113 76	4.67	233 50
Templeton, .	2,271 08	829 02	3,100 10	-	368 54	368 54	-	3,468 64	145 69	64 77	210 46	98 23	5.69	284 50
Tewksbury, .	2,049 39	333 85	2,383 24	4,119 90	84 94	4,204 84	-	6,588 08	50 81	12 93	63 74	47 62	6.57	328 50
Tisbury, .	2,073 24	217 30	2,290 54	-	33 23	33 23	-	2,323 77	112 59	17 22	124 81	72 67	1.93	96 50
Townsend, .	3,242 61	760 18	4,002 79	-	26 59	26 59	-	4,029 38	125 86	4 40	130 26	73 82	6.04	302 00
Truro, .	4,129 48	524 93	4,654 41	-	159 71	159 71	-	4,814 12	166 12	50 54	216 66	136 93	3.16	158 00
Tyngsborough, .	6,067 10	1,119 55	7,186 65	-	1,378 71	1,378 71	-	8,565 36	184 44	227 13	411 57	152 13	6.07	303 50
Uxbridge, .	1,466 68	274 56	1,741 24	-	4,911 77	4,911 77	-	6,653 01	93 88	1,070 67	1,764 05	66 53	2.94	147 00

Table showing the Amounts expended for Repairs, Maintenance, etc. — Concluded.

TOWN OR CITY.	AMOUNTS EXPENDED.						Total expended.	EXPENDED PER MILE IN 1911.			Cost per Mile under Maintenance (Miles).	Amount to be assessed on Cities and Towns.	
	REVENUE APPROPRIATION.			MOTOR VEHICLE FEES FUND.				From Revenue Appropriation.	From Motor Vehicle Fees Fund.	Total.			
	To 1911.	During 1911.	Total.	To 1911.	During 1911.	Total.							
Wales, . . .	\$507 03	\$57 15	\$564 18	-	-	-	\$564 18	\$54 95	-	\$54 95	\$58 10	1.04	\$52 00
Walpole, . . .	11,305 98	1,276 49	12,582 47	\$8,585 18	\$1,146 63	\$9,731 81	22,314 28	281 16	\$252 56	533 72	201 87	4.54	227 00
Ware, . . .	2,653 53	785 65	3,444 18	-	-	-	3,444 18	187 95	-	187 95	118 68	4.18	209 00
Wareham, . . .	8,829 06	1,297 92	10,126 98	3,161 73	1,516 69	4,678 42	14,805 40	154 14	180 13	334 27	165 27	8.42	421 00
Warren, . . .	9,638 64	833 29	10,471 93	4,193 42	1,459 85	5,653 27	16,125 20	203 24	356 06	559 30	238 21	4.10	205 00
Watertown, . . .	3,885 19	136 99	4,022 18	5,552 60	1 45	5,554 05	9,576 23	161 16	1 71	162 87	312 04	.85	42 50
Wayland, . . .	10,896 45	842 38	11,738 83	3,723 03	1,381 55	5,104 58	16,843 41	326 50	535 48	861 98	406 01	2.58	129 00
Webster, . . .	272 34	146 38	418 72	50 43	-	50 43	469 15	225 20	-	225 20	186 09	.65	32 50
Wellesley, . . .	2,648 16	270 87	2,919 03	1,519 76	1,207 46	2,727 22	5,646 25	229 55	1,023 27	1,252 82	241 66	1.18	59 00
Wellfleet, . . .	3,485 99	824 09	4,310 08	5 20	-	5 20	4,315 28	177 22	-	177 22	131 60	4.65	232 50
Wenham, . . .	5,724 27	568 46	6,292 73	2,919 36	116 98	3,036 34	9,329 07	322 99	66 46	389 45	334 00	1.76	88 00
Westborough, . . .	1,241 71	333 20	1,574 91	-	-	-	1,574 91	111 44	-	111 44	66 96	2.99	149 50
West Boylston, . . .	2,406 25	1,666 21	4,072 46	-	368 32	368 32	4,440 78	1,074 97	237 63	1,312 60	205 10	1.55	77 50
West Bridgewater, . . .	12,548 28	327 44	12,875 72	763 21	619 62	1,382 83	14,258 55	103 62	196 08	299 70	435 87	3.16	158 00
West Brookfield, . . .	3,154 09	670 83	3,824 92	194 46	523 42	717 88	4,542 80	250 81	195 30	445 61	157 53	2.68	134 00
Westfield, . . .	17,488 04	2,641 81	20,129 85	2,748 74	882 21	3,630 95	23,760 80	454 70	151 84	606 54	272 17	5.81	290 50
Westford, . . .	2,771 26	534 58	3,305 84	-	-	-	3,305 84	164 48	-	164 48	116 20	3.25	162 50

Westminster, . . .	8,500 21	1,025 63	9,615 84	10,343 09	81 06	10,424 15	20,039 99	195 35	15 44	210 79	164 09	5 25	262 50
West Newbury, . .	12,236 33	601 14	12,927 47	3,383 89	15 53	3,399 42	16,326 89	135 78	3 05	138 83	294 07	5 09	251 50
Weston, . . .	7,900 29	2,027 99	9,928 28	5,107 72	10 58	5,118 30	15,046 58	643 80	3 36	647 16	264 24	3 15	157 50
Westport, . . .	10,905 56	153 03	11,063 59	3,190 22	4,939 28	8,188 50	19,252 09	37 18	1,173 95	1,211 13	176 57	4 25	155 03
West Springfield, .	6,080 40	631 43	6,711 83	1,099 86	19 75	1,119 61	7,831 44	330 59	10 34	340 93	313 34	1 91	95 50
West Tisbury, . .	1,779 16	80	1,779 96	-	-	-	1,779 96	15	-	15	29 90	5 35	80
Westwood, . . .	1,856 93	103 15	1,965 08	1,075 31	252 49	1,327 80	3,292 88	103 00	240 47	343 47	165 13	1 05	52 50
Weymouth, . . .	11,686 37	1,183 66	12,820 03	96	687 77	688 73	13,503 76	173 87	105 49	279 36	245 27	6 52	326 00
Whately, . . .	7,117 74	4,787 45	11,905 19	1,248 09	1,033 20	2,331 29	14,238 14	1,230 70	278 46	1,509 16	372 04	3 89	194 50
Whitman, . . .	3,160 58	134 00	3,294 58	3,126 33	889 69	4,016 02	7,310 60	78 82	523 34	602 16	124 00	1 70	85 00
Wilbraham, . . .	5,507 05	6,925 85	12,432 90	4,961 44	6,924 45	11,855 89	24,318 79	1,436 90	1,436 60	2,873 50	238 18	4 82	241 00
Williamsburg, . .	3,915 94	221 42	4,137 36	-	6 25	6 25	4,143 61	83 55	2 36	85 91	137 32	2 65	132 50
Williamstown, . .	7,595 39	2,274 31	9,869 70	1,430 97	3,580 99	5,011 96	14,881 66	1,093 41	1,721 63	2,815 04	355 15	2 03	104 00
Wilmington, . . .	144 65	192 73	297 38	820 37	12 51	832 88	1,130 26	41 61	3 41	45 02	56 11	3 67	152 73
Winchester, . . .	4,386 88	612 59	4,999 47	2,176 90	76 55	2,253 45	7,252 92	312 54	39 06	351 60	221 02	1 96	98 00
Winchendon, . . .	187 49	103 75	296 24	197 60	-	197 60	493 84	63 97	-	63 97	51 34	1 70	85 00
Windsor, . . .	716 02	136 70	852 72	-	-	-	852 72	73 49	-	73 49	63 05	1 86	93 00
Woburn, . . .	2,812 73	656 65	3,469 38	1,917 45	52 74	1,970 19	5,439 57	323 47	25 93	349 45	175 22	2 03	101 50
Worcester, . . .	16,323 02	2,602 59	19,015 61	4,354 63	725 85	5,080 48	24,096 09	653 33	177 47	835 80	426 36	4 09	204 50
Wrentham, . . .	6,336 27	504 05	6,840 32	2,943 12	434 11	3,377 23	10,217 55	123 24	106 14	229 38	109 29	4 09	204 50
Yarmouth (north), .	4,437 84	547 62	4,985 46	-	320 05	320 05	5,305 51	147 60	86 27	233 87	83 21	3 71	440 00
Yarmouth (south), .	7,012 09	803 22	7,820 31	-	1,512 17	1,512 17	9,332 48	158 78	297 09	455 87	105 91	5 09	

APPENDIX K.

STATEMENT SHOWING THE NUMBER OF PETITIONS RECEIVED AND THE LENGTH PETITIONED FOR, THE LAYOUTS MADE AND THEIR LENGTH AND DISTRIBUTION IN THE VARIOUS COUNTIES OF THE COMMONWEALTH.

COUNTIES.	PETITIONS RECEIVED.				PETITIONS SITUATED IN —			LAYOUTS MADE IN —			Number of Layouts.
	County.	City.	Towns.	Totals.	City.	Towns.	Totals.	City.	Towns.	Totals.	
Barnstable,	4	-	44	48	-	15	15	-	15	15	104
Berkshire,	15	12	54	81	2	27	29	2	15	17	93
Bristol,	2	6	47	55	2	17	19	1	17	18	98
Dukes,	2	-	5	7	-	5	5	-	5	5	25
Essex,	3	21	59	83	7	25	32	7	17	24	120
Franklin,	1	-	58	59	-	18	18	-	14	14	89
Hampden,	4	6	32	42	3	17	20	2	11	13	83
Hampshire,	1	5	49	55	1	17	18	1	12	13	78
Middlesex,	14	25	97	136	9	42	51	7	32	39	169
Nantucket,	-	-	1	1	-	1	1	-	1	1	14
Norfolk,	2	5	54	61	1	26	27	1	22	23	89
Plymouth,	-	7	64	71	1	25	26	1	19	20	125
Suffolk,	-	3	6	9	2	2	4	2	1	3	7
Worcester,	-	9	159	168	2	56	58	2	43	45	245
Totals,	48	99	729	876	30	293	323	26	224	250	1,339

NUMBER OF PETITIONS RECEIVED, ETC. — *Concluded.*

COUNTIES.	LENGTHS PETITIONED FOR.		LENGTHS LAID OUT.							
	Feet. Miles.		1894-1910.		1911.		TOTALS.			
			Feet.	Miles.	Feet.	Miles.	Feet.	Miles.	Feet.	Miles.
Barnstable,	709,827	134.44	492,310	93.24	21,817	4.13	514,127	97.37		
Berkshire,	802,969	152.08	314,886	59.64	9,070	1.72	323,956	61.36		
Bristol,	814,631	154.29	331,810	62.85	29,037	5.50	360,847	68.35		
Dukes,	121,043	22.93	90,100	17.06	5,959	1.13	96,059	18.19		
Essex,	1,121,150	212.34	352,280	66.72	23,339	4.42	375,619	71.14		
Franklin,	676,299	128.09	242,987	46.02	18,825	3.57	261,822	49.59		
Hampden,	689,104	130.51	285,174	54.01	12,522	2.37	297,696	56.38		
Hampshire,	513,694	97.29	187,726	35.55	12,628	2.39	200,354	37.94		
Middlesex,	1,662,207	314.81	596,428	112.97	36,183	6.85	632,611	119.82		
Nantucket,	34,185	6.47	34,211	6.48	-	-	34,211	6.48		
Norfolk,	727,471	137.78	286,849	54.32	8,975	1.70	295,824	56.02		
Plymouth,	1,064,989	201.70	477,488	90.43	27,203	5.15	504,691	95.58		
Suffolk,	69,815	13.23	19,016	3.60	-	-	19,016	3.60		
Worcester,	1,967,525	372.62	711,177	134.70	16,230	3.07	727,407	137.77		
Totals,	10,974,909	2,078.58	4,422,452	837.59	221,788	42.00	4,644,240	879.59		

APPENDIX L.

TABLE SHOWING THE WORK DONE UNDER THE "SMALL TOWN" ACT SINCE ITS PASSAGE IN 1900.

[Section 17, Chapter 47, Revised Laws, and Chapter 279, Acts of 1908.]

TOWNS.	ALLOTMENTS.			LENGTHS BUILT (FEET).			Types of Roads.
	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	
<i>Barnstable County.</i>							
Eastham,	\$2,260 40 ¹	-	\$2,260 40	8,750	-	8,750	1,150 feet graded only; 7,900 feet surfaced with oil, sand and clay. Sand and oil. Macadam. Broken stone and clay.
Mashpee,	1,200 00	-	1,200 00	1,944	-	1,944	
Provincetown,	5,095 56	-	5,095 56 ²	9,930	-	9,930	
Wellfleet,	1,653 00	-	1,653 00	2,250	-	2,250	
	\$10,208 96	-	\$10,208 96	22,874	-	22,874	
<i>Berkshire County.</i>							
Alford,	\$1,669 00	\$400 00	\$2,069 00	5,663	1,150	6,813	Gravel.
Becket,	1,450 00	900 00 ³	2,350 00	3,250	1,330	4,580	Gravel and macadam.
Egremont,	3,546 00	700 00 ⁴	4,246 00	8,180	1,550	9,730	Gravel.
Florida,	3,886 00	700 00 ⁵	4,586 00	6,261	560	6,821	Gravel.

¹ \$335.40 of 1910 allotment withdrawn.² Town contributed an equal amount.³ Town contributed \$500.⁴ Town contributed \$300.⁵ Town contributed \$150.

WORK DONE UNDER THE "SMALL TOWN" ACT—Continued.

TOWNS.	ALLOTMENTS.			LENGTHS BUILT (FEET).			Types of Roads.
	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	
<i>Berkshire County—Con.</i>							
Hancock,	\$400 00	\$400 00	\$800 00	750	400	1,150	Gravel.
Hinsdale,	1,000 00	-	1,000 00 ¹	1,125	-	1,125	Bituminous macadam.
Lanesborough,	2,952 00	-	2,952 00	5,500	-	5,500	Gravel road and steel concrete bridge.
Monterey,	2,518 00	900 00 ²	3,418 00	12,200	2,000	14,200	Gravel and culverts.
Mount Washington,	1,792 00	400 00	2,192 00	2,780	- ³	2,780	Gravel road and bridge repairs.
New Ashford,	961 00	-	961 00	2,600	-	2,600	Gravel road and culvert construction and repairs.
New Marlborough,	6,228 00	1,500 00 ¹	7,728 00	20,050	2,500	22,550	Gravel.
Otis,	3,568 00	617 92	4,185 92	10,000	1,250	11,250	Gravel road and culvert repairs.
Peru,	1,991 00	400 00	2,391 00	8,345	400	8,745	Gravel.
Richmond,	-	750 00	750 00 ¹	-	1,389	1,389	Gravel.
Sandisfield,	7,610 00	500 00 ¹	8,110 00	20,018	- ³	20,018	Macadam.
Savoy,	4,665 00	600 00	5,265 00	9,850	700	10,550	Gravel.
Sheffield,	6,988 00	500 00 ¹	7,488 00	13,482	750	14,232	Grading and gravel.
Tyringham,	3,165 00	800 00 ⁴	3,965 00	4,449	1,101	5,550	Grading and macadam.
Washington,	3,998 00	600 00 ⁵	4,598 00	7,370	1,200	8,570	Grading and gravel.

West Stockbridge,	5,326 00	700 00 ⁵	6,026 00	12,050	1,145	13,195	Gravel.
Windsor,	1,000 00	-	1,000 00 ¹	580	530	1,110	Macadam.
<i>Bristol County.</i>							
Easton,	\$12,000 00	-	\$12,000 00 ¹	31,686	-	31,686	Macadam.
Norton,	4,176 00	-	4,176 00 ¹	9,850	-	9,850	Macadam.
Raynham,	3,316 00	-	3,316 00	6,135	-	6,135	Macadam.
Rehoboth,	2,300 00	\$1,200 00 ³	3,500 00 ¹	-	5,100	5,100	Macadam.
Westport,	3,400 00	-	3,400 00 ¹	6,150	-	6,150	Macadam.
<i>Dukes County.</i>							
Gay Head,	\$25,192 00	\$1,200 00	\$26,392 00	53,821	5,100	58,921	-
<i>Essex County.</i>							
Boxford,	\$1,061 00	\$600 00	\$1,661 00 ¹	9,930	2,450	12,380	Gravel.
Danvers,	7,000 00	-	7,000 00	7,450	12,250	19,700	Gravel.
Essex,	932 00	-	932 00 ¹	22,000	-	22,000	Gravel and repairs.
Georgetown,	2,950 00	-	2,950 00 ¹	9,597	5,840	15,437	Gravel and macadam.
Groveland,	1,000 00	-	1,000 00 ⁶	-	12,740	12,740	Bituminous gravel.
Marblehead,	7,800 00	-	7,800 00 ¹	11,008	-	11,008	Macadam.

¹ Town contributed an equal amount.² Town contributed \$500.³ Work begun but not completed.⁴ Town contributed \$400.⁵ Town contributed \$200.⁶ \$4,000 from motor vehicle fees fund used with this allotment, together with \$5,000 contributed by the town.

WORK DONE UNDER THE "SMALL TOWN" ACT — Continued.

TOWNS.	ALLOTMENTS.			LENGTHS BUILT (FEET).			Types of Roads.
	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	
<i>Essex County — Con.</i>							
Middleton,	\$2,644 00	\$400 00	\$3,044 00	6,750	2,550	9,300	Gravel.
North Andover,	1,000 00	500 00	1,500 00 ¹	2,250	2,300	4,550	Gravel.
Salisbury,	1,948 00	-	1,948 00	2,150	-	2,150	Macadam.
Saugus,	-	1,200 00	1,200 00 ¹	-	- ²	-	-
Swampscott,	2,925 00	-	2,925 00 ¹	5,200	-	5,200	Macadam.
Topsfield,	3,984 00	1,000 00 ¹	4,984 00	24,371	11,000	35,375	Gravel.
<i>Franklin County.</i>							
Bernardston,	\$2,265 00	\$200 00 ¹	\$2,465 00	12,800	1,000	13,800	Gravel.
Charlmont,	2,200 00	1,000 00 ^{2,4}	3,200 00	1,754	-	1,754	Gravel.
Colrain,	-	900 00 ⁵	900 00	-	2,650	2,650	Gravel.
Conway,	4,352 00	900 00 ⁵	5,252 00	7,960	1,755	9,715	Gravel.
Gill,	2,412 00	800 00 ⁶	3,212 00	8,400	3,175	11,575	Gravel road and bridge repairs.
Hawley,	2,497 00	400 00	2,897 00	7,600	- ²	7,600	Grading and gravel.
Heath,	3,127 00	400 00	3,527 00	7,472	800	8,272	Gravel.
Leverett,	4,576 00	1,000 00 ⁵	5,576 00	12,379	2,700	15,079	Gravel.
Leyden,	2,793 00	400 00	3,193 00	10,700	1,000	11,700	Gravel.

Monroe,	.	.	.	.	3,298 00	600 00 ⁶	3,898 00	4,850	2,470	7,320	Gravel.
New Salem,	.	.	.	.	4,952 00	500 00 ¹	5,452 00	8,737	- ⁷	8,737	Gravel.
Orange,	.	.	.	.	1,000 00	950 00	1,950 00 ¹	4,470	- ²	4,470	Gravel.
Rowe,	.	.	.	.	3,173 00	450 00	3,623 00	8,410	1,306	9,716	Gravel.
Shutesbury,	.	.	.	.	3,134 00	600 00 ⁶	3,734 00	8,750	2,200	10,950	Gravel.
Warwick,	.	.	.	.	5,320 00	150 00 ¹	5,470 00	5,500	1,500	7,000	Gravel.
Wendell,	.	.	.	.	5,788 00	800 00 ⁸	6,588 00	11,800	- ⁷	11,800	Grading and gravel.
<i>Hampden County.</i>											
Blandford,	.	.	.	.	\$5,887 00	\$10,050 00	\$60,937 00	121,582	20,556	142,138	
Chester,	.	.	.	.	\$5,394 00	\$841 16	\$6,235 16	8,110	900	9,010	Grading and gravel.
East Longmeadow,	.	.	.	.	-	200 00 ¹	200 00	-	850	850	Gravel.
Granville,	.	.	.	.	680 00	1,000 00 ¹	1,680 00	2,850	- ⁷	2,850	Gravel and macadam.
Hampden,	.	.	.	.	5,023 00	1,500 00 ⁹	6,523 00	7,297	6,300	13,597	Grading and gravel.
Holland,	.	.	.	.	3,808 00	400 00	4,208 00	35,400	800	36,200	Gravel.
Longmeadow,	.	.	.	.	164 00	400 00	564 00	425	- ⁷	425	Grading.
Montgomery,	.	.	.	.	1,200 00	-	1,200 00	1,425	-	1,425	Macadam and concrete culvert.
Russell,	.	.	.	.	1,420 00	400 00	1,820 00	3,533	1,217	4,750	Gravel.
Southwick,	.	.	.	.	1,000 00	393 85	1,393 85	-	600	600	
Tolland,	.	.	.	.	4,128 00	1,000 00 ⁸	5,128 00	16,579	4,007	20,586	Gravel.
	.	.	.	.	3,242 06	700 00 ⁶	3,942 06	5,500	- ⁷	5,500	Grading and concrete culvert.
					\$26,059 06	\$6,835 01	\$32,894 07	81,119	14,674	95,793	

¹ Town contributed an equal amount.² Work not yet begun.³ This allotment and \$1,200 allotted in 1910 expended in widening, removing ledge, etc., at various points on about 6 miles of road.⁴ Town contributed \$400.⁵ Town contributed \$500.⁶ Town contributed \$200.⁷ Work begun but not completed.⁸ Town contributed \$250.⁹ Town contributed \$1,000.

WORK DONE UNDER THE "SMALL TOWN" ACT—Continued.

TOWNS.	ALLOTMENTS.			LENGTHS BUILT (FEET).			Types of Roads.
	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	
Hampshire County.							
Amherst,	\$1,800 00	-	\$4,800 00 ¹	4,435	-	4,435	Macadam.
Chesterfield,	4,420 00	\$750 00	5,170 00	3,300	2,450	5,750	Gravel.
Cummington,	4,233 00	-	4,233 00	9,900	-	9,900	Gravel.
Easthampton,	2,000 00	-	2,000 00 ¹	2,430	-	2,430	Macadam.
Enfield,	4,314 00	1,000 00 ¹	5,314 00	23,610	- ²	23,610	Gravel.
Greenwich,	2,276 00	400 00	2,776 00	3,100	1,500	4,600	Gravel.
Huntington,	1,800 00	-	1,800 00 ¹	5,425	-	5,425	Gravel.
Middlefield,	1,310 00	600 00 ³	1,910 00	4,200	2,000	6,200	Gravel.
Pelham,	3,220 00	800 00 ⁴	4,020 00	6,800	1,300	8,100	Gravel.
Plainfield,	3,180 00	400 00	3,580 00	4,036	500	4,536	Gravel.
Prescott,	3,330 00	600 00 ³	3,930 00	6,130	1,300	7,430	Grading and gravel.
Southampton,	1,250 00	-	1,250 00	-	1,963	1,963	-
Westhampton,	3,500 00	750 00 ⁵	4,250 00	10,743	1,400	12,143	Gravel.
Williamsburg,	500 00	1,000 00 ¹	1,500 00	900	3,200	4,100	Macadam.
Worthington,	6,027 00	1,150 00 ⁶	7,177 00	10,980	3,335	14,315	Gravel.
	\$46,269 00	\$7,450 00	\$53,719 00	95,989	18,948	114,937	

Middlesex County.

Ayer,	\$4,000 00	-	\$4,000 00 ¹	17,600	-	17,600	Gravel.
Bedford,	-	\$1,500 00	1,500 00 ¹	-	2,100	2,100	Macadam.
Belmont,	2,300 00	-	2,300 00 ¹	5,237	-	5,237	Macadam.
Billerica,	5,984 00	-	5,984 00 ¹	8,250	-	8,250	Macadam.
Burlington,	4,000 00	2,000 00	6,000 00 ¹	-	7,100	7,100	-
Carlisle,	2,536 00	400 00	2,936 00	10,800	1,750	12,550	Gravel.
Dracut,	2,000 00	2,000 00	4,000 00 ¹	-	2,800	2,800	Macadam.
Dunstable,	1,799 00	400 00	2,199 00	10,300	3,000	13,300	Gravel.
Framingham,	4,000 00	-	4,000 00 ¹	-	4,200	4,200	Macadam.
Hopkinton,	-	2,000 00	2,000 00 ¹	-	- ²	-	Gravel.
Hudson,	4,000 00	1,000 00 ¹	5,000 00	10,857	8,200	19,057	Grading and gravel.
Littleton,	2,012 00	-	2,012 00 ¹	4,492	-	4,492	Gravel.
Maynard,	9,333 89	-	9,333 89 ¹	15,233	-	15,233	Grading, macadam and bridge repairs.
North Reading,	5,000 00	2,500 00	7,500 00 ¹	9,493	6,200	15,693	Macadam.
Pepperell,	1,000 00	-	1,000 00 ¹	4,050	-	4,050	Gravel.
Reading,	2,132 00	1,000 00	3,132 00 ¹	2,950	1,200	4,150	Macadam.
Sherborn,	5,558 00	-	5,558 00	28,700	-	28,700	Gravel.
Shirley,	5,534 00	-	5,534 00	19,550	2,900	22,450	Gravel.
Stow,	3,145 00	-	3,145 00	8,472	-	8,472	Gravel.
Wakefield,	5,150 00	-	5,150 00 ¹	6,986	-	6,986	Macadam.

¹ Town contributed an equal amount.² Work begun but not completed.³ Town contributed \$200.⁴ Town contributed \$250.⁵ Town contributed \$300.⁶ Town contributed \$1,000.

WORK DONE UNDER THE "SMALL TOWN" ACT—Continued.

TOWNS.	ALLOTMENTS.			LENGTHS BUILT (FEET).			Types of Roads.
	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	
Middlesex County — Con.							
Wayland,	-	\$1,449 50	\$1,449 50 ¹	-	1,175	1,175	Bituminous macadam.
Westford,	\$2,366 30	-	2,366 30	5,400	-	5,400	Gravel.
	\$71,900 19	\$14,249 50	\$86,149 69	168,310	40,625	208,905	
Norfolk County.							
Avon,	\$2,969 00	-	\$2,969 00	8,290	-	8,290	Gravel and macadam.
Bellingham,	1,412 00	-	1,412 00	2,750	-	2,750	Macadam.
Medfield,	1,040 00	-	1,040 00 ¹	720	-	720	Macadam.
Medway,	4,828 00	-	4,828 00 ¹	11,256	-	11,256	Macadam.
Millis,	5,136 00	-	5,136 00	10,300	3,850	14,150	Gravel.
Norfolk,	1,500 00	-	1,500 00 ¹	-	-	-	-
	\$16,885 00	-	\$16,885 00	33,316	3,850	37,166	
Plymouth County.							
Abington,	\$2,600 00	-	\$2,600 00 ¹	5,760	-	5,760	Macadam.
Carver,	13,990 00	-	13,990 00 ¹	46,545	-	46,545	Macadam.
East Bridgewater,	9,142 87	-	9,142 87 ¹	17,090	-	17,090	Macadam.
Halifax,	3,804 00	\$500 00	4,304 00	7,725	- ²	7,725	Macadam.

	2,048 82 ¹	-	2,048 82 ³	2,827	-	2,827	Macadam.
Hanover,	9,992 00	1,000 00	10,992 00 ¹	30,209	3,615	33,824	Macadam.
Hanson,	700 00	1,500 00 ¹	2,200 00	2,640	10,150	12,790	Macadam and gravel.
Lakeville,	3,280 00	600 00	3,880 00 ¹	13,071	6,040	19,111	Gravel.
Norwell,	4,548 00	875 45 ¹	5,423 45	28,471	3,436	31,907	Gravel road and concrete bridge.
Pembroke,	1,000 00	-	1,000 00 ¹	2,000	-	2,000	Sand and oil.
Plymouth,	2,667 00	400 00 ⁴	3,067 00	16,713	- ⁵	16,713	Gravel.
Plympton,	4,500 00	1,000 00 ¹	5,500 00	19,027	6,277	25,304	Macadam and gravel.
Rochester,	-	1,000 00	1,000 00 ¹	-	2,165	2,165	Macadam.
Rockland,	-	1,500 00	1,500 00 ¹	-	7,200	7,200	Sand and oil.
Wareham,	\$58,272 69	\$3,375 45	\$66,648 14	192,078	38,883	230,961	
<i>Worcester County.</i>							
Ashburnham,	\$5,644 00	\$1,450 00 ¹	\$7,094 00	12,065	6,270	18,335	Gravel.
Berlin,	4,024 00	400 00 ¹	4,424 00	12,883	2,450	15,333	Gravel.
Bolton,	4,414 00	600 00 ⁴	5,014 00	22,835	4,125	26,960	Gravel.
Boylston,	3,060 00	-	3,060 00	8,530	-	8,530	Gravel.
Brookfield,	900 00	-	900 00	2,500	-	2,500	Macadam.
Dana,	3,669 00	800 00 ⁶	4,469 00	9,225	2,900	12,125	Gravel.
Hardwick,	-	3,000 00	3,000 00 ¹	-	- ⁵	-	Macadam.
Holden,	1,000 00	200 00	1,200 00 ¹	1,600	-	1,600	Gravel.
Hubbardston,	3,035 00	-	3,035 00	6,655	-	6,655	Gravel.

¹ Town contributed an equal amount.² Work not yet begun.³ \$319.18 of 1903 allotment withdrawn.⁴ Town contributed \$200.⁵ Work begun but not completed.⁶ Town contributed \$400.

WORK DONE UNDER THE "SMALL TOWN" ACT—*Concluded.*

TOWNS.	ALLOTMENTS.			LENGTHS BUILT (FEET).			Types of Roads.
	Previous to 1911.	In 1911.*	Total to Nov. 30, 1911.	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	
Worcester County — Con.							
Mendon,	\$3,464 00	\$1,000 00 ¹	\$4,464 00	16,742	2,000	18,742	Gravel and repairs.
New Braintree,	450 00	450 00	900 00	1,400	— ²	1,400	Macadam.
Oakham,	3,918 00	500 00	4,418 00	9,410	2,500	11,910	Gravel and macadam.
Oxford,	1,600 00	1,500 00	3,100 00 ¹	6,900	6,798	13,698	Gravel.
Petersham,	6,960 00	—	6,960 00	8,635	1,800	10,435	Gravel.
Phillipston,	—	700 00 ³	700 00	—	— ⁴	—	Gravel.
Rutland,	1,804 00	—	1,804 00	2,581	—	2,581	Gravel and macadam.
Shrewsbury,	300 00	1,000 00 ¹	1,300 00	—	3,800	3,800	Gravel.
Southbridge,	6,400 00	—	6,400 00 ¹	2,293	—	2,293	Vitrified paving brick (paved).
Winchendon,	4,000 00	—	4,000 00 ¹	9,210	—	9,210	Gravel.
	\$54,692 00	\$11,600 00	\$66,292 00	133,464	32,643	166,107	

¹ Town contributed an equal amount.³ Town contributed \$300.² Work not yet begun.⁴ Work begun but not completed.

SUMMARY.

COUNTIES.	ALLOTMENTS.			LENGTHS BUILT (FEET).		
	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.	Previous to 1911.	In 1911.	Total to Nov. 30, 1911.
Barnstable,	\$10,208 96	-	\$10,208 96	22,874	-	22,874
Berkshire,	64,713 00	\$11,367 92	76,080 92	154,503	17,955	172,458
Bristol,	25,192 00	1,200 00	26,392 00	53,821	5,100	58,921
Dukes,	400 00	-	400 00	-	-	-
Essex,	33,244 00	3,700 00	36,944 00	100,710	49,130	149,840
Franklin,	50,887 00	10,050 00	60,937 00	121,582	20,556	142,138
Hampden,	26,059 06	6,835 01	32,894 07	81,119	14,674	95,793
Hampshire,	46,269 00	7,450 00	53,719 00	95,989	18,948	114,937
Middlesex,	71,900 19	14,249 50	86,149 69	168,310	40,625	208,935
Norfolk,	16,885 00	-	16,885 00	33,316	3,850	37,166
Plymouth,	58,272 69	8,375 45	66,648 14	192,078	38,883	230,961
Worcester,	54,692 00	11,600 00	66,292 00	133,464	32,643	166,107
	\$458,722 90	\$74,827 88	\$533,550 78	1,157,766 ¹	242,364	1,400,130

¹ The difference between this figure and that given in the last annual report is explained by the fact that some sections of road were graded one year and surfaced the next, the lengths so improved having been entered twice.

APPENDIX M.

APPROPRIATIONS.

Appropriations for the Construction and Repair of State Highways.

1894, chapter 497, section 8,	\$300,000 00
1895, chapter 347, section 3,	400,000 00
1896, chapter 481, section 3,	600,000 00
1897, chapter 340, section 1,	800,000 00
1898, chapter 539, section 1,	400,000 00
1899, chapter 396, section 1,	500,000 00
1900, chapter 442, section 1,	500,000 00
1901, chapter 269, section 1,	500,000 00
1902, chapter 246, section 1,	500,000 00
1903, chapter 280, section 1,	¹ 2,250,000 00
1907, chapter 446, section 1,	¹ 2,500,000 00
	<hr/>
	\$9,250,000 00

*Appropriations for the Salaries and Expenses of the Commission,
paid from the Treasury of the Commonwealth.*

1898, chapter 497, section 1,	\$14,300 00
1899, chapter 367, section 1,	28,500 00
1900, chapter 141, section 1,	28,500 00
1901, chapter 451, section 1,	33,750 00
1902, chapter 67, section 1,	33,750 00
1903, chapters 14 and 485, section 1,	² 43,950 00
1904, chapters 19 and 461, section 1,	² 39,300 00
1905, chapters 36, 431 and 480, section 1.	² 46,150 00
1906, chapters 36 and 140, section 1,	² 49,514 14
1907, chapter 157, section 1,	³ 66,950 00
1908, chapter 212, section 1,	³ 76,300 00
1909, chapter 127,	⁴ 47,300 00
1910, chapter 139,	⁴ 56,250 00
1911, chapter 555, section 1,	⁴ 61,250 00

¹ To cover expenses of construction for a period of five years.² Includes expenses of automobile department.³ Includes expenses of moth suppression and automobile department in part.⁴ Includes expense of moth suppression.

Appropriations for Maintenance, paid from the Treasury of the Commonwealth.

1903, chapter 280, section 2,	\$40,000 00
1904, chapter 316, section 1,	50,000 00
1905, chapter 36, section 1,	60,000 00
1906, chapter 36, section 1,	64,166 66
1907, chapter 157, section 1,	100,000 00
1908, chapters 212 and 657, section 1,	150,000 00
1909, chapters 127 and 493, section 1,	250,000 00
1910, chapter 139, section 1,	200,000 00
1911, chapter 555, section 1,	200,000 00



PART II.

SIXTH ANNUAL REPORT

OF THE

MASSACHUSETTS HIGHWAY COMMISSION,

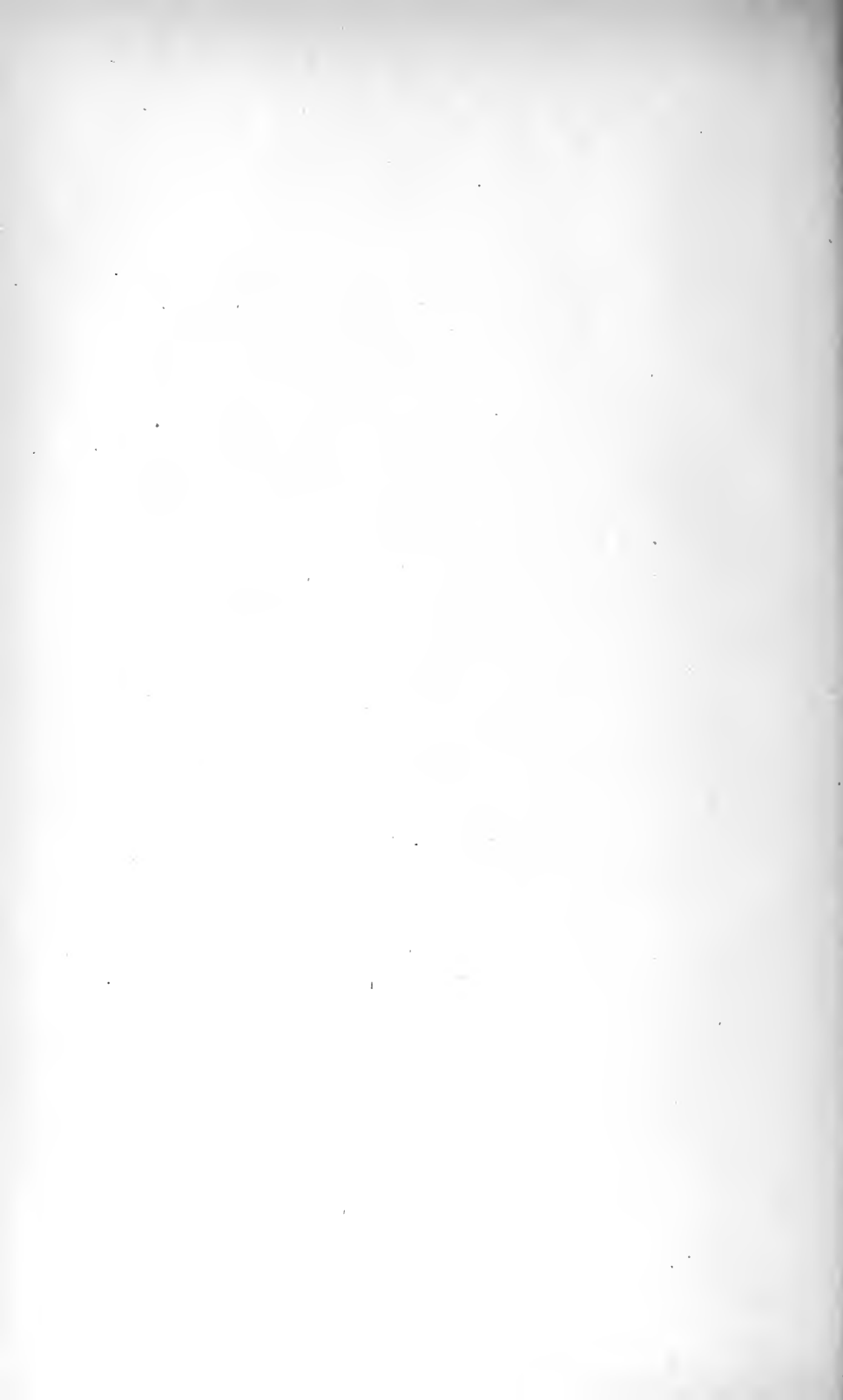
FOR THE

FISCAL YEAR ENDING NOVEMBER 30, 1911,

ON

COMPANIES ENGAGED IN THE TRANSMISSION OF
INTELLIGENCE BY ELECTRICITY.

CHAPTER 433, ACTS OF 1906.



PART II.

ANNUAL REPORT OF THE MASSACHUSETTS HIGHWAY COMMISSION CONCERNING COMPANIES ENGAGED IN THE TRANSMISSION OF INTELLIGENCE BY ELECTRICITY.

Not nearly as many telephone hearings were required during the fiscal year of 1911 as were required in each of the last three or four years, when the question of a new schedule of rates for the central and suburban district was under consideration.

The commission has had many conferences, however, with its experts and with the officials of the telephone company in regard to particular rates and schedules. It has also held formal hearings on the following matters, which are more fully mentioned hereinafter:—

Complaints as to the rates and service in the towns of Chilmark and Gay Head, in the town of Barnstable, in the town of Dennis and in Marlborough and Hudson.

In addition to these, the commission has had many conferences with individual subscribers as to particular rates and particular complaints involving the question of facilities furnished, charges for mileage, toll rates, collections under the measured service, etc. As at all times in the past, the officials of the telephone company have given the members of the commission the most effective co-operation.

The particular important changes in rates and the recommendations made by the commission are set forth at length later in this report.

INCREASE IN THE NUMBER OF TELEPHONES.

Professor Jackson reports that during the twelve months ending Nov. 30, 1911, the number of telephones operated by the New England Telephone and Telegraph Company, and

the Southern Massachusetts Telephone Company, increased 29,590, making the total on Nov. 30, 1911, 284,426 telephones.

The increase for the year ending Dec. 30, 1910, was 26,515.

It must be also taken into account that the proposed groupings and new rates which had been adopted during the year, making substantial reductions in many classes of service and in many localities, had not been in effect long enough to affect these figures.

ANNUAL RETURNS.

The annual returns for the year ending June 30, 1911, were received from the several telephone and telegraph companies doing business in this State. These have been analyzed, and abstracts of them are shown in Appendix A.

A comparative statement of statistical information relating to telephone companies for the years ending June 30, 1911, and 1910, is given herewith.

State of Massachusetts.

	1911.	1910.	Increase.
Number of subscribers,	271,608	243,779	27,829
Number of instruments,	279,874	251,413	28,461
Number of operators,	3,636	3,566	70
Number of pay stations,	7,714	7,159	555
Gross receipts,	\$11,937,880	\$11,088,885	\$848,995
Operating expenses,	\$8,432,785	\$7,973,634	\$459,151 ¹
Net earnings,	\$3,505,095	\$3,115,251	\$389,844 ¹
Per cent. of expenses to earnings,	70.6	71.9	1.3 ²
Number of subscribers on party lines,	226,700	205,915	20,785
Number of subscribers on single lines,	44,908	37,864	7,044
Underground system:—			
Conduit, feet,	3,432,350	3,317,552	114,798
Duct, feet,	17,128,187	16,643,388	484,799
Cable, feet,	8,382,338	7,750,912	631,426
Wire, miles,	455,089	391,683	63,406
Submarine system:—			
Cable, feet,	56,160	56,882	722 ³
Wire, miles,	780	747	33
Overhead system:—			
Pole line, miles,	10,099	11,217	1,118 ³
Iron wire, miles,	44,420	51,165	6,745 ²
Copper wire, miles,	182,352	164,832	17,520

¹ In the statement of operating expenses for the year 1911 shown above, the taxes amounting to \$774,134 are not included although the taxes are included in the 1910 figures. This would alter the increase net earnings to a decrease amounting to \$384,290.

² Decrease.

It should be noted that the gross receipts represent the earnings (less rebates and discounts) from telephone traffic solely, and the data here given refer only to conditions within the State.

In this connection it is of interest to note the reduction of pole line, amounting to over 1,100 miles, and the steadily growing increase of the underground system.

NEW RATES APPROVED OUTSIDE THE BOSTON AND SUBURBAN DISTRICT.

After the new schedule had been adopted in the Boston and suburban district, a study of the various rates in force in other localities made it seem desirable that the rates in those localities should be readjusted so as to more nearly conform to the rates in force in the metropolitan and suburban district. Accordingly, a new rate schedule was suggested, covering the whole State, containing eight groupings of the various exchanges with simplified rates therein, conforming as nearly as possible to the rates recommended and adopted in the Boston and suburban district. This schedule was approved and is rapidly being put into effect.

This schedule resulted in reducing many rates in most of the localities affected, and in no case increased any rate for similar classes of service. It also had a tendency to very much reduce the number of the heavily loaded multi-party lines in the larger communities.

This schedule and its effect are more fully set forth in the report of the commission's experts, D. C. and William B. Jackson, which is in part as follows:—

LOCAL SERVICE RATES IN THE CITIES AND TOWNS OTHER THAN BOSTON AND ITS SUBURBS.

During the course of the year, the telephone company put improved rates into effect throughout the State. These rates had in view the reduction of the multi-party service, with large numbers of parties per line, and the simplification of the service, in addition to reductions in the prices paid by subscribers. The exchanges of the company in Massachusetts were grouped for the purpose under eight groups.

Group No. 1 includes Springfield and Indian Orchard, conjointly, and Worcester, making 2 places in Massachusetts within the group.

Group No. 2 includes Fall River, Lawrence, Lowell, Lynn and New Bedford, making 5 Massachusetts places within the group.

Group No. 3 includes Brockton, Fitchburg, Haverhill, Holyoke, Salem and Taunton, making 6 Massachusetts places within the group.

Group No. 4 includes Pittsfield, making 1 Massachusetts place in the group.

Group No. 5 includes Beverly, Gloucester, North Adams and Northampton, making 4 Massachusetts places in the group.

Group No. 6 includes Chicopee, Clinton, Gardner, Leominster, Marlborough, Newburyport, South Framingham and Westfield, making 8 Massachusetts places in the group.

Group No. 7 includes Adams, Amesbury, Amherst, Andover, Athol, Bridgewater, Concord, Danvers, Easthampton, Franklin, Great Barrington, Greenfield, Hudson, Lee, Mansfield, Marblehead, Martha's Vineyard, Middleborough, Milford, Nantucket, Natick, North Brookfield, Orange, Palmer, Peabody, Plymouth, Rockland, Saugus, Southbridge, Spencer, Stoughton, Walpole, Ware, Webster, Westborough, Whitman and Winchendon, making 37 Massachusetts places in the group.

Group No. 8 includes Dalton, Falmouth, Hanover, Housatonic, Lenox, Magnolia, Manchester, Medfield, Millbury, North Easton, Provincetown, Sagamore, Sharon, Stockbridge, Turner's Falls, Williamstown, Wrentham and 116 smaller exchanges, making 133 Massachusetts places in the group.

The grouping here referred to is made for the purpose of making rates which approximate as closely as practicable to the requirements of the various parts of the diverse territory. The grouping is based largely upon the telephone development in the different places. These groups have been extended over the whole of the company's territory, so that they go throughout Vermont, New Hampshire and Maine, as well as Massachusetts. At the time the grouping was made, the average number of telephones per exchange or exchange district in group 1 was 12,532, in group 2 was 5,990 per exchange, in group 3 was 3,299 per exchange, in group 4 was 4,254 per exchange, in group 5 was 1,821 per exchange, in group 6 was 1,327 per ex-

change, in group 7 was 548 per exchange, and in group 8 was 122 per exchange.

The new rates are given in the attached table. The rates are for local service in the individual exchanges or exchange districts.

It will be observed that groups 1 and 2, composed of the larger exchanges, have no business service on party lines, and no residence service with more than four parties on a line. In the remainder of the groups, which are mostly of small exchanges, two-party flat-rate business service is offered, and four-party business service is offered only in the group of very small exchanges. In only the last five groups six-party flat-rate residence service is offered. Inasmuch as the service in each place having the multi-party rates is local service, in a relatively small exchange unentangled with large city service, the multi-party rates may probably remain compatible with good service to the subscribers.

The new arrangement has made it practicable for the company to make obsolete its old six-party service in the larger places, and the old ten-party service in the smaller places, which classes of service were poor. The abandonment has been effected without injuriously affecting the subscribers' privileges. The readjustment of the classification has been accompanied by a lowering of rates so that the subscribers throughout the State have made a gain by this rearrangement of rates.

It is estimated that this change of rates would reduce the company's gross receipts obtained from the number of telephones in use by from \$50,000 to \$80,000. The time elapsed since the rates were put into effect is as yet too brief to afford a check on this estimate. The new rates were made effective in different portions of the territory at different dates, between July 1 and Nov. 1, 1911; but the company's plant is not yet brought up to the point where it can take care of all subscribers desiring the new service.

RATES IN EFFECT OUTSIDE OF THE BOSTON AND SUBURBAN DISTRICT.

	One-party Business.	Flat Res- idence.	Two- Party Business.	Flat Res- idence.	Four- party Business.	Flat Res- idence.	Six- party Business.	Flat Res- idence.	One-party Measured Serv- ice.	Two-party Measured Serv- ice.	Four- party Business.	Coin Box Res- idence.
Group 1, .	\$63 00	\$36 00	-	\$30 00	-	\$25 00	-	-	\$39 00 (780 calls)	-	\$27 50	\$18 25
Group 2, .	57 00	33 00	-	27 00	-	25 00	-	-	36 00 (720 calls)	-	27 50	18 25
Group 3, .	51 00	30 00	\$42 00	24 00	-	21 00	-	-	33 00 (825 calls)	-	27 50	18 25
Group 4, .	45 00	30 00	36 00	24 00	-	21 00	-	\$18 00	30 00 (750 calls)	\$24 00 (600 calls)	-	-
Group 5, .	42 00	27 00	33 00	21 00	-	-	-	18 00	-	24 00 (600 calls)	-	-
Group 6, .	39 00	27 00	30 00	21 00	-	-	-	18 00	-	-	-	-
Group 7, .	36 00	27 00	27 00	21 00	-	-	-	18 00	-	-	-	-
Group 8, .	33 00	24 00	24 00	21 00	\$21 00	-	-	18 00	-	-	-	-

LOCAL TOLL RATES.

In order that the rates throughout the State might more nearly conform to the rates in the Boston and suburban district, it seemed possible that the toll rates for short distances throughout the State might be put upon the same basis, and therefore on Dec. 13, 1910, a rate was approved by the commission making a 5-cent toll charge between exchanges and toll points that were situated not more than 5 miles apart, air line measurement, a rate of 10 cents between exchanges and toll points that were more than 5 and not more than 15 miles apart, and a rate of 15 cents between exchanges and toll points that were 15 and not more than 25 miles apart. This change in rates affected over 390 exchanges.

This will result in a very substantial reduction in the toll rates charged throughout the Commonwealth for short distances. It is impossible to estimate how much that reduction will amount to, at the present time, but it is possible that some of it will be made up by the increase in business because of the lower rates.

Several other minor changes were made which seemed necessary from time to time to meet special local conditions.

RECOMMENDED SCHEDULE OF RATES FOR BOSTON AND SUBURBAN DISTRICT.

The rates recommended last year for the central and suburban district are apparently working smoothly and satisfactorily considering that there were nearly 100,000 subscribers to be dealt with.

The number of telephones in the central exchanges increased over 4,200, and in the suburban exchanges over 10,200 from November, 1910, to November, 1911, as against 3,000 and 7,300, respectively, from November, 1909, to November, 1910. The percentage of increase for the last year was 8.1 per cent. in the central exchanges and 14.2 per cent. in the suburban exchanges, compared with 6.2 per cent. and 11.5 per cent., respectively, in the previous year.

A large majority of all the subscribers are now taking the new rates, with the exception of the four and six party un-

limited suburban service. Even in this service, nearly one-half of all four-party subscribers and nearly one-third of all six-party subscribers have already subscribed to the new rates, although the time when the old rates would have become obsolete was extended to March, 1913, for that class of service.

It is impossible at this time to tell accurately what the reduction in the revenue of the company will be or the saving to the subscribers, but judging by the figures collated by Professor Jackson for ten months of this year, as compared with those for ten months of last year, the average saving for each telephone in use is about \$3.35 in the suburban district, and about \$3 per telephone in use in the seven central exchanges.

From the best figures available it seems now as if the reduction in the gross revenue of the company in this district this year will probably be somewhere between \$300,000 and \$400,000, as was estimated by the commission in its letter recommending the new schedule of rates, in August, 1910. The commission believes that this reduction in the gross revenue of the company is not permanent, as it feels sure that the new rates will result in a much larger number of subscribers in a short period of time, and that there will be a considerable increase in the revenue also from tolls. It will still remain true, however, that the amount collected from each telephone subscriber, among the smaller users, for the same service, will be much less, especially in the measured service, than it was under the old schedule of rates.

Of course the commission realizes that while this large reduction in the gross revenue of the company was made, this does not mean that there was a uniform reduction of the rate, per telephone, because the new rates were essentially a readjustment of telephone rates so that they would operate more fairly as between the different classes of subscribers, and so that the larger users would be required to more nearly pay for the service which they received, and not have so much of it charged to the smaller users, especially those having measured service who, at the time the investigation was made, were bearing more than their fair share of the cost of the service.

ONE AND TWO-PARTY UNLIMITED SUBURBAN SERVICE.

As it seemed likely that there were a large number of people who might desire an unlimited service covering all the suburbs, and as it seemed that a rate covering one and two party lines could be adopted without unbalancing the rest of the schedule, two new rates were added to the schedule recommended by the commission in August, 1910, for the metropolitan and suburban district.

These consisted of a single party, full suburban unlimited residence service at \$45 per year, and a two-party, full suburban unlimited residence service, at \$36 per year. These two rates were made effective on Feb. 9, 1911, and there are already 6,072 subscribers to this class of service.

MISCELLANEOUS MODIFICATIONS.

Various miscellaneous modifications of the rates have been made. One which was quite important was the extension of the 15-cent toll rate for points within the suburban district to exchanges and toll points located not more than 25 miles apart, instead of 24 miles, as it had been. This change made a meeting point between the short toll rates in force in the metropolitan and suburban district and those in force under the new schedule adopted throughout the State, at 25 miles.

SPECIAL HEARINGS.

During the year the commission had three petitions presented on which it gave hearings which were well attended. These were from Chilmark and Gay Head, Barnstable and Dennis and Marlborough and Hudson.

Chilmark and Gay Head.

A hearing was given on this petition, and the questions involved appear fully in the following letter, which was sent to the petitioners by the commission:—

APRIL 12, 1911.

MR. B. F. MAYHEW, *Chilmark, Mass.*

DEAR SIR:—In the matter of the petition of certain telephone subscribers in Chilmark and Gay Head, requesting a reduction in the rate charged on farmers' lines by the Southern Massachusetts Telephone Company, a hearing was given to the petitioners and the company on Thursday, March 30.

At the hearing it appeared that the rates complained of are the regular farmers' rates charged throughout New England in similar communities for this class of service with the regular mileage charge, the mileage being figured on an air-line distance, with no charge for mileage except for distances beyond 6 miles.

It appeared, also, that the whole island of Martha's Vineyard, some 6 or 7 miles from the exchange center in one direction, and 15 in the other, is included in the unlimited service; that such service is a great convenience, and that it would be a distinct disadvantage if two exchanges were established with a toll between, even though the mileage charge was thereby done away with.

It also appeared that the whole net revenue from exchange service secured on the island is only sufficient to pay $1\frac{1}{2}$ per cent. on the value of the plant there.

After due consideration, the commission is unable to recommend that the mileage charge complained of be done away with, because such a charge is universal elsewhere through the Commonwealth, and seems, so far as the commission can see at the present time, the fairest way, on the whole, of distributing the cost of service among the different subscribers. Moreover, in this particular case, the charge is evidently not excessive, because there is not enough money collected thereby to pay for the additional cost of the lines, maintenance and depreciation, even without interest on their cost.

For the Massachusetts Highway Commission.

(Signed) F. I. BIELER,
Secretary.

Barnstable.

The Barnstable hearing really arose from the fact that the company had established some new exchanges at different points in order to give better service and, as they thought, better accommodation to the telephone users in that district.

The result of this was that in the town of Barnstable there were three separate and distinct exchanges, and between two of them a regular toll charge. On account of the distance that they were apart, and the size of the town, the regular toll rate in force throughout the State required a 10-cent charge. There

was some question as to whether the new exchanges were located so as to accommodate the best interests of the larger number of the subscribers.

However, the main objection was to the 10-cent rate. This was obviated by a suggestion made by the commission, and adopted by the company, applicable not only to Barnstable but to any other large community, that in no event should any toll rate be charged between adjoining exchanges situated in the same municipality, in excess of 5 cents. The petitioners agreed that if this rate could be secured it would be a proper solution of the difficulty.

It was also claimed at the hearing that a majority of the West Barnstable subscribers would prefer to be connected with the Cotuit exchange rather than with the Barnstable exchange. A canvass was made of the subscribers and, so far as they could be reached, it seemed that they preferred to remain connected with the Barnstable exchange.

Dennis.

One representative appeared from Dennis and objected to the present arrangement and location of the exchanges which serve the telephone users in the town of Dennis. This matter was taken under advisement for the purpose of securing information from the subscribers as a whole before any finding was made thereon.

The representative who appeared objected to the location of the new exchange recently established in Dennis, and claimed that a majority of the subscribers would be better accommodated by the discontinuance of the Dennis exchange and the establishment of two exchanges, one on either side of the town, part of the subscribers to be connected with one and part with the other.

As there seemed to be a difference of opinion between this representative of Dennis and the representative of the telephone company as to the wishes of the subscribers in Dennis, nothing further was done in the matter, pending the collection of further information which should enable the commission to determine, with a full knowledge of all the facts, what would best serve the community.

Marlborough-Hudson.

While several matters were presented in the petition, it developed at the hearing that the main cause of contention was the discontinuance of the six and ten party lines, with unlimited service, which covered both the Marlborough and Hudson exchanges for one rate.

There was no evidence presented at the hearing which would seem to justify the commission in recommending the restoration of this six and ten party line service in a district like Marlborough and Hudson. It seemed clear that subscribers in either community, having occasion to call subscribers in the other, frequently could secure service well adapted to their requirements by taking the one or two party lines covering service in both Marlborough and Hudson. Subscribers having little occasion to call the other community would seem to have a service well adapted to their needs in the local service, paying the minimum toll charge for each call made to the other exchange.

It also seemed inadvisable to recommend changes in rate schedules when the company had just adopted and was putting into effect a new rate schedule throughout its entire territory, which it was believed would be shown by experience to be better adapted to the needs of all the various communities, and would certainly lead to a much greater uniformity of rates and fewer discriminations than heretofore existed.

The commission felt that these new rates should have a fair trial, so that the actual results therefrom could be ascertained before any changes were made.

The only other matter which seemed of much importance was the question of the character of service furnished, which the company agreed was not what it ought to be, but was occasioned by the fact that they had installed a modern switchboard, and that nearly 80 per cent. of the subscribers had either their ring number or line number changed, and considerable time was required in order to remedy all the defects that occurred from the use of the new switchboard and its complicated machinery, and to smooth up the service while the changes were being made in the subscribers' numbers and rings.

The company states that this temporary deterioration in the service is inevitable wherever a change is made from a magneto to a common battery operation. At the present time the company reports to the commission that the service has been restored to the standard.

FUTURE STUDIES AS TO REVENUE AND TRAFFIC.

It seemed wise to the commission, now that the new rates have gone into effect, that further studies should be made, both of revenue and traffic, in order to determine what, if any, further readjustments and reductions should be made, not only in local service, but as between local and toll service.

Therefore, in August, 1911, the commission wrote to the telephone company requesting it to collect further data "which can be used to show the results of the new rates recently put into effect in the different classes of service in the metropolitan and suburban district as compared with the old rates in that district. It would also like to have any data collected and collated which would enable its experts and yours to ascertain if it is possible at some future time to agree upon a formula which might with some reasonable degree of accuracy allocate traffic, revenue, expenses and investment as between toll and local service." The commission also requested the company to act in co-operation with its experts, Prof. D. C. Jackson of the Institute of Technology and Mr. A. R. Patterson, auditor of the firm of Stone & Webster.

The company is at present engaged in collecting the necessary data, but it is evident that in order to be of any substantial value the data must cover a period of at least a year from the time that a sufficient number of subscribers were under the new schedules to make it a fair criterion on which to judge of future conditions.

Of course it is understood that the commission intends to keep in close touch with the situation, especially the workings of the new rate schedules, which have been recommended not only for the Boston and suburban district, but throughout the State, and from time to time to make such recommendations in regard

to rates as seem necessary in order to make them more uniform and equitable.

The commission believes that when the new rate schedules have been in force for a sufficient length of time for their full effect to be shown in the receipts of the company, experience will show where the weak points are and what rates should be changed or readjusted in order to secure the greatest equality between the different classes of subscribers.

WM. D. SOHIER,

F. D. KEMP,

Massachusetts Highway Commission.

APPENDIX A.

ABSTRACTS OF ANNUAL RETURNS FOR THE YEAR ENDING JUNE 30, 1911, OF COMPANIES ENGAGED IN THE TRANSMISSION OF INTELLIGENCE BY ELECTRICITY IN MASSACHUSETTS.

LARGE TELEPHONE COMPANIES.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY.

Location of principal business office: 15 Dey Street, New York, N. Y.

Date of organization: March, 1885.

Date of incorporation: March, 1885.

State in which incorporated: New York.

Date of annual meeting: last Tuesday in March.

Date when company began to give service: 1885.

GENERAL OFFICERS AND OFFICIAL TITLES.

Theodore N. Vail,	. . . . .	<i>President.</i>
Edward J. Hall,	. . . . .	<i>Vice-President.</i>
Harry B. Thayer,	. . . . .	<i>Vice-President.</i>
Bernard E. Sunny,	. . . . .	<i>Vice-President.</i>
Union N. Bethell,	. . . . .	<i>Vice-President.</i>
William R. Driver,	. . . . .	<i>Vice-President.</i>
Nathan C. Kingsbury,	. . . . .	<i>Vice-President.</i>
Charles P. Ware,	. . . . .	<i>Vice-President.</i>
Charles E. Hubbard,	. . . . .	<i>Secretary.</i>
William R. Driver,	. . . . .	<i>Treasurer.</i>
Charles G. Du Bois,	. . . . .	<i>Comptroller.</i>

DIRECTORS AND RESIDENCES.

Charles W. Amory,	. . . . .	Boston, Mass.
Thomas B. Bailey,	. . . . .	Boston, Mass.
George F. Baker,	. . . . .	New York, N. Y.
Francis Blake,	. . . . .	Weston, Mass.
Harry H. Brigham,	. . . . .	New York, N. Y.
Alexander Cochrane,	. . . . .	Boston, Mass.
T. Jefferson Coolidge, Jr.,	. . . . .	Manchester, Mass.
W. Murray Crane,	. . . . .	Dalton, Mass.
Henry P. Davison,	. . . . .	New York, N. Y.
Rudolph Ellis,	. . . . .	Bryn Mawr, Pa.

Norman W. Harris,	Chicago, Ill.
Henry L. Higginson,	Boston, Mass.
Henry S. Howe,	Boston, Mass.
Charles E. Hubbard,	Boston, Mass.
Lewis C. Ledyard,	New York, N. Y.
John J. Mitchell,	Chicago, Ill.
William L. Putnam,	Manchester, Mass.
Thomas Sanders,	E. Brookfield, Vt.
Sylvanus L. Schoonmaker,	New York, N. Y.
Eugene V. R. Thayer,	Lancaster, Mass.
Theodore N. Vail,	Lyndon, Vt.
Frank E. Warner,	Boston, Mass.
John I. Waterbury,	Morristown, N. J.
Moses Williams,	Brookline, Mass.
Robert Winsor,	Weston, Mass.

CAPITAL.

Capital authorized by charter,	\$500,000,000 00
Capital authorized by vote of company,	330,518,700 00 ¹
Capital paid in, 2,754,323 shares; par value, \$100,	275,432,300 00

Whole number of stockholders. 41,128

DEBTS.

Bonds or notes issued, viz.:—

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
July 1, 1899	July 1, 1929	Stocks and bonds deposited as collateral.	4	\$73,000,000 00 ²
March 1, 1906	March 1, 1936	Not secured,	4	22,734,000 00
May 1, 1904	May 1, 1907	Not secured,	5	5,000 00
Jan. 1, 1907	Jan. 1, 1910	Not secured,	5	10,000 00
Feb. 23, 1910	Demand, .	Not secured,	5	5,250,000 00
Jan. 6, 1911	Demand, .	Not secured,	5	1,000,000 00
Feb. 1, 1911	Demand, .	Not secured,	6	570,000 00
Feb. 1, 1911	Demand, .	Not secured,	6	240,000 00
Feb. 1, 1911	Demand, .	Not secured,	5	1,000,000 00
Feb. 23, 1911	Demand, .	Not secured,	5	1,000,000 00
March 24, 1911	Demand, .	Not secured,	5	500,000 00
Dec. 28, 1910	Demand, .	Not secured,	6	3,000,000 00
Dec. 30, 1910	Demand, .	Not secured,	6	2,400,000 00
Jan. 30, 1911	Demand, .	Not secured,	6	1,105,000 00
Feb. 26, 1911	Demand, .	Not secured,	6	1,340,000 00
Sept. 15, 1909	Sept. 15, 1913	Not secured,	4½	2,000,000 00

¹ Includes 550,364 shares to be issued under circular of June 20, 1911.

² Not including \$5,000,000 treasury bonds.

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
Sept. 15, 1909	Sept. 15, 1914	Not secured,	4½	\$2,000,000 00
Sept. 15, 1909	Sept. 15, 1915	Not secured,	4½	2,000,000 00
Sept. 15, 1909	May 1, 1912	Not secured,	4	10,500,000 00
Total amount of bonds and notes,				\$129,654,000 00
Capital stock installments,				3,025 00
Capital paid in,				275,432,300 00
Total liability for capital and loans,				\$405,089,325 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR (WHOLE SYSTEM).

	Items.	Totals.
Telephone revenue, ¹		\$10,447,405 11
Operation,	\$5,288,863 47	
Current maintenance,	1,455,699 01	
Depreciation,	1,260,000 00	
Total expenses, not including taxes,		8,004,562 48
Net earnings,		\$2,442,842 63
Miscellaneous income,		31,024,454 63
Total income above expenses,		\$33,467,297 26
Interest charges and taxes:—		
Interest on funded debt,	\$3,956,800 65	
Interest on floating debt,	1,400,109 18	
Taxes,	1,029,406 24	
Total charges,		6,386,316 07
Surplus of net income above charges,		\$27,080,981 19
Dividends declared, 8 per cent. on various amounts,		21,194,024 62
Surplus for year ending June 30, 1911,		\$5,886,956 57

EARNINGS (WHOLE SYSTEM).

Gross telephone revenue:—	
Exchange service:—	
Subscribers' stations,	\$11,307 47
Toll service:—	
Toll service,	\$7,604,071 92
Attachments and rentals,	196,996 46
Messenger service,	171 17
Leased lines,	2,634,858 09
Total toll service,	10,436,097 64
Telephone revenue,	\$10,447,405 11
Amount carried forward,	\$10,447,405 11

¹ Telephone revenue in Massachusetts, \$18,877.51.

	Items.	Totals.
<i>Amount brought forward,</i>		\$10,447,405 11
Miscellaneous income:—		
Real estate revenue,	\$92,703 39	
Dividends on stocks of other companies,	20,138,686 32	
Interest on bonds and notes,	3,367,426 37	
Other miscellaneous income,	528,363 45	
Revenue from licensed companies for rights and privileges of connection, of administrative, engineering, and other general services, and for use of telephone patents and other property,	6,897,275 10	
Total miscellaneous income,		31,024,454 63
Total telephone revenue and income,		\$41,471,859 74

EXPENSES (WHOLE SYSTEM).

Operation:—		
General,		\$3,327,037 40
Commercial,		350,105 01
Traffic,		1,392,534 21
Rights, privileges and use of property:—		
Conduit, pole and other space,	\$40,177 48	
Use of other plant,	177,066 49	
Total rights, privileges and use of property,		217,243 97
Insurance.		1,942 88
Total operation,		\$5,288,863 47
Total current maintenance,		1,455,699 01
Depreciation of plant,		1,260,000 00
Total expenses not including taxes,		\$8,004,562 48

GENERAL BALANCE SHEET.

<i>Assets.</i>		
Exchange construction,		\$71,252 10
Toll construction:—		
Toll lines,	\$41,809,185 79	
Equipment,	1,646,593 57	
Total toll construction,		43,455,779 36
Construction in process,		1,475,890 90
Real estate required in part for operation,		2,078,404 59
Investment real estate not required for operation,		507,359 00
Office furniture and fixtures,		178,030 40
Tools and vehicles,		139,865 93
Total plant account,		\$47,906,582 28
Telephones,		12,131,515 50
Securities of other companies,		359,867,657 58
Current assets:—		
Cash on hand,	\$26,994,964 13	
Notes receivable,	55,420,491 89	
Accounts receivable,	6,086,074 52	
Supplies on hand,	837,937 28	
Total current assets,		89,339,467 82
Discount,		1,845,000 00
Total debits,		\$511,090,223 18

	<i>Liabilities.</i>	<i>Items.</i>	<i>Totals.</i>
Capital stock, common,		\$275,432,300 00	
Capital stock, installments,		3,025 00	
Total capital stock,		<u>\$275,435,325 00</u>	
Bonded debt, less treasury bonds, \$5,000,000,			95,734,000 00
Current liabilities:—			
Loans and notes payable,		\$33,920,000 00	
Audited vouchers and accounts,		543,223 28	
Dividends not called for (including dividend payable July 15, \$5,508,064),		5,515,322 00	
Matured interest coupons, unpaid (including due July 1, 1911, \$1,460,000),		1,501,265 00	
Unearned revenue,		2,933 37	
Total current liabilities,		<u>41,482,743 65</u>	
Accrued liabilities:—			
Interest accrued but not due,		\$500,518 62	
Taxes accrued but not due,		176,105 85	
Miscellaneous accrued liabilities,		300,468 57	
Total accrued liabilities,		<u>977,093 04</u>	
Sinking and other special funds:—			
Depreciation reserve,			38,505,014 19
Total liabilities,			<u>\$452,134,175 88</u>
Balance, surplus,			<u>58,956,047 30</u>
Total credits,			<u>\$511,090,223 18</u>

PROFIT AND LOSS ACCOUNT.

	<i>Dr.</i>	<i>Cr.</i>
Balance from previous year,		\$50,781,691 36
Gross earnings from operation,		10,447,405 11
Miscellaneous income,		7,425,638 55
Real estate revenue,		92,703 39
Income from securities,		20,138,686 32
Interest on bonds and notes,		3,367,426 37
Premium on capital stock issued on conversion of bonds,		5,258,344 69
Miscellaneous items of earnings pertaining to previous years,		29,054 68
Expenses, not including taxes,	\$8,004,562 48	
Interest on funded debt,	3,956,800 65	
Interest on floating debt,	1,400,109 18	
Taxes,	1,029,406 24	
Depreciation reserve,	3,000,000 00	
Dividends declared on stock,	21,194,024 62	
Balance, surplus,	58,956,047 30	
	<u>\$97,540,950 47</u>	<u>\$97,540,950 47</u>

PLANT ACCOUNTS (ADDITIONS AND DEDUCTIONS DURING THE YEAR).

	<i>Additions.</i>	<i>Totals.</i>
Exchange construction, ¹		\$3,197 20
Toll construction,		1,644,816 21
Construction in process, net,		906,789 60
Amount carried forward,		<u>\$2,554,803 01</u>

¹ Credit item.

	Items.	Totals.
<i>Amount brought forward,</i>		\$2,554,803 01
Real estate required for operation,		31,544 41
Equipment,		320,031 44
Tools and vehicles,		23,424 72
Total additions,		\$2,923,409 18
<i>Deductions.</i>		
Construction sold, removed or abandoned,	\$946,861 61	
Office furniture and fixtures,	545 03	
Total deductions,		947,406 64
Net additions to plant account for the year,		\$1,976,002 54

STATISTICAL INFORMATION (OVERHEAD, UNDERGROUND AND SUBMARINE
SYSTEMS IN MASSACHUSETTS).

Underground system: —		
Conduit, feet,		108,778
Duct, feet,		730,012
Cable, feet,		249,387
Wire, feet,		40,760,940
Submarine system: —		
Cable, feet,		4,364
Wire, feet,		158,437
Overhead system: —		
Pole line, miles,		502.55
Iron wire, miles,		199.22
Copper wire, miles,		15,538.57

GENERAL REMARKS AND EXPLANATIONS.

"No exchange service is given by this company in the State of Massachusetts; its business in said State consists of the furnishing of lines and facilities to enable the transmission of intelligence, through the exchanges of other telephone companies, between the subscribers and patrons of one of such companies and those of another. The traffic carried on over its lines is almost entirely interstate."

AUTOMATIC TELEPHONE COMPANY OF NEW BEDFORD.

Location of principal business office: 43 William Street, New Bedford, Mass.

Date of organization: October, 1898.

Date of incorporation: Nov. 12, 1898.

State in which incorporated: Massachusetts.

Date of annual meeting: second Wednesday in April.

Date when company began to give service: Dec. 1, 1900.

Service is given by this company over its own lines in Acushnet, Dartmouth, and New Bedford, Mass.

GENERAL OFFICERS AND OFFICIAL TITLES.

Francis T. Akin,	<i>President.</i>
Lot B. Bates,	<i>Vice-President.</i>
Frederic H. Taber,	<i>Treasurer and Clerk.</i>
Clarence H. James,	<i>Assistant Treasurer.</i>
William R. Binkley,	<i>Superintendent.</i>

DIRECTORS AND RESIDENCES.

Francis T. Akin,	New Bedford, Mass.
Lot B. Bates,	New Bedford, Mass.
Frederic Taber,	New Bedford, Mass.
Frederic H. Taber,	New Bedford, Mass.
Edward D. Sherman,	New Bedford, Mass.
Frederick W. Besse,	New Bedford, Mass.
Thomas Hersom,	New Bedford, Mass.
William C. Hawes,	New Bedford, Mass.
Timothy J. Moriarty,	New Bedford, Mass.

CAPITAL.

Capital authorized by charter,	\$100,000 00
Capital authorized by vote of company,	200,000 00
Capital paid in, 4,000 shares; par value, \$50,	200,000 00

Whole number of stockholders,	177
Number of stockholders resident in Massachusetts,	170
Amount of stock held in Massachusetts (shares),	3,832

DEBTS.

Bonds or notes issued, viz.:—

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
Jan. 12, 1911	July 12, 1911	Note,	5	\$13,000 00
April 6, 1911	July 6, 1911	Note,	5	2,000 00
April 15, 1911	July 15, 1911	Note,	5	4,000 00
Feb. 4, 1911	Aug. 4, 1911	Note,	5	1,500 00
Feb. 8, 1911	Aug. 8, 1911	Note,	5	9,000 00
Feb. 24, 1911	Aug. 24, 1911	Note,	5	2,500 00
Jan. 6, 1911	Jan. 6, 1912	Note,	5½	10,000 00
April 11, 1911	April 11, 1912	Note,	5	6,000 00
<i>Bonds.</i>				
May 4, 1911	May 1, 1931	First mortgage,	5	11,000 00
May 5, 1911	May 1, 1931	First mortgage,	5	1,000 00
May 9, 1911	May 1, 1931	First mortgage,	5	4,000 00
May 25, 1911	May 1, 1931	First mortgage,	5	1,000 00
June 1, 1911	May 1, 1931	First mortgage,	5	4,000 00
Total amount of bonds and notes,				\$69,000 00
Capital paid in,				200,000 00
Total liability for capital and loans,				\$269,000 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Gross telephone revenue,	\$45,880 04	
Less rebates and discounts,	1,650 51	
Telephone revenue,		\$44,229 53
Operation,	\$12,234 13	
Current maintenance,	5,883 68	
Depreciation,	5,000 00	
Total expenses, not including taxes,		23,117 81
Net telephone earnings,		\$21,111 72
Miscellaneous income,		603 82
Total income above expenses,		\$21,715 54
Interest charges and taxes:—		
Interest on floating debt,	\$2,904 70	
Taxes,	3,041 56	
Total charges,		5,946 26
Net divisible income,		\$15,769 28
Dividends:—		
Dividends declared on preferred stock, 6%,	\$6,000 00	
Dividends declared on common stock, 7%,	7,000 00	
Total dividends declared,		13,000 00
Surplus for year ending June 30, 1911,		\$2,769 28

EARNINGS.

Gross telephone revenue:—	
Exchange service:—	
Subscribers' stations,	\$45,023 06
Toll service:—	
Toll service,	856 98
Total gross telephone revenue,	\$45,880 04
Less rebates and discounts,	1,650 51
Telephone revenue,	\$44,229 53
Miscellaneous income:—	
Real estate revenue,	603 82
Total telephone revenue and income,	\$44,833 35

EXPENSES.

Operation:—	
General:—	
Executive department,	\$1,192 00
Accounting department,	1,942 00
Financial department,	374 94
Legal department,	1,553 60
Total general,	\$5,062 54
Amount carried forward,	\$5,062 54

	Items.	Totals.
<i>Amount brought forward,</i>		\$5,062 54
<i>Operation — Concluded.</i>		
<i>Commercial:—</i>		
Advertising,	\$432 09	
Canvassing,	1,002 00	
Directory,	146 30	
Revenue collecting,	1,560 00	
Total commercial,		3,140 39
<i>Traffic:—</i>		
Traffic supervision,	\$962 00	
Service inspection,	1,326 00	
Operators' wages,	390 00	
Operating clerical wages,	360 00	
Other operating expenses,	102 31	
Total traffic,		3,140 31
<i>Rights, privileges and use of property:—</i>		
Conduit, pole and other space,		205 01
Insurance,		685 88
Total operation,		\$12,234 13
<i>Maintenance:—</i>		
<i>Repairs:—</i>		
Aërial plant,	\$2,481 34	
Underground plant,	46 74	
Central office equipment,	2,095 84	
Subscribers' equipment,	1,259 76	
Total repairs,		5,883 68
Depreciation of plant,		5,000 00
Total expenses, not including taxes,		\$23,117 81

GENERAL BALANCE SHEET.

Assets.

<i>Exchange construction:—</i>		
Overhead lines,	\$93,560 82	
Underground lines,	67,086 90	
Central office equipment,	48,430 14	
Subscribers' station equipment,	56,166 10	
Total exchange construction and equipment,		\$265,243 96
<i>Toll construction:—</i>		
Overhead lines,		3,746 80
Real estate required for operation,		15,005 00
Total plant account,		\$283,995 76
Contracts and licenses,		15,000 00
<i>Current assets:—</i>		
Cash on hand,	\$1,466 31	
Accounts receivable,	10,562 14	
Total current assets,		12,028 45
Total debits,		\$311,024 21

<i>Liabilities.</i>	<i>Items.</i>	<i>Totals.</i>
Capital stock, common,	\$100,000 00	
Capital stock, preferred,	100,000 00	
Total capital stock,	<hr/>	\$200,000 00
Bonded debt,		21,000 00
Current liabilities:—		
Loans and notes payable,	\$48,000 00	
Unearned subscribers' rentals,	7,547 36	
Total current liabilities,	<hr/>	55,547 36
Sinking and other special funds:—		
Depreciation,		10,000 00
Total liabilities,		<hr/> \$286,547 36
Balance, surplus,		24,476 85
Total credits,		<hr/> \$311,024 21

PROFIT AND LOSS ACCOUNT.

	<i>Dr.</i>	<i>Cr.</i>
Balance from previous year,		\$26,808 57
Gross earnings from operation,		45,880 04
Real estate revenue,		603 82
Appreciation of real estate,		2,000 00
Expenses, not including taxes,	\$23,117 81	
Rebates and discounts,	1,650 51	
Interest on floating debt,	2,904 70	
Taxes,	3,041 56	
Commission on sale of \$21,000 issue of bonds,	2,101 00	
Diminution of license account,	5,000 00	
Dividends declared on stock,	13,000 00	
Balance, surplus,	24,476 85	
	<hr/>	
	\$75,292 43	\$75,292 43

PLANT ACCOUNTS (ADDITIONS AND DEDUCTIONS DURING THE YEAR).

Additions.

<i>Additions.</i>	<i>Items.</i>	<i>Totals.</i>
Exchange construction:—		
Overhead lines,	\$11,591 44	
Underground lines,	2,565 25	
Central office equipment,	3,545 16	
Subscribers' station equipment,	7,057 47	
Total exchange construction and equipment,	<hr/>	\$24,759 32
Real estate required for operation,		2,005 00
Total additions to plant account for the year,		<hr/> \$26,764 32

STATISTICAL INFORMATION.

Number of subscribers,	1,854
Number of instruments,	2,020
Number of operators,	1
Number of subscribers on party lines,	531
Number of subscribers on single lines,	1,323

Underground system: —

Conduit, feet,	.	.	.	.	.	.	.	.	18,480
Duct, feet,	.	.	.	.	.	.	.	.	136,030
Cable, feet,	.	.	.	.	.	.	.	.	61,350
Wire, feet,	.	.	.	.	.	.	.	.	9,864,100

Overhead system: —

Pole line, miles,	.	.	.	.	.	.	.	.	38
Iron wire, miles,	.	.	.	.	.	.	.	.	403
Copper wire, miles,	.	.	.	.	.	.	.	.	137

CAPE COD TELEPHONE COMPANY.

Location of principal business office: Hyannis, Mass.

Date of organization: Feb. 5, 1903.

Date of incorporation: Feb. 10, 1903.

Date in which incorporated: Massachusetts.

Date of annual meeting: first week day in September.

Date when company began to give service: April 23, 1903.

Service is given by this company over its own lines in the town of Barnstable.

GENERAL OFFICERS AND OFFICIAL TITLES.

Frank Percy Goss,	.	.	.	.	.	.	.	.	<i>President.</i>
Alfred Willard Guyer,	.	.	.	.	.	.	.	.	<i>Vice-President.</i>
Arthur Gordon Guyer,	.	.	.	.	.	.	.	.	<i>Clerk and Treasurer.</i>

DIRECTORS AND RESIDENCES.

Frank Percy Goss,	.	.	.	.	.	.	Hyannis, Mass.
Alfred Willard Guyer,	.	.	.	.	.	.	Hanover, N. H.
Arthur Gordon Guyer,	.	.	.	.	.	.	Hyannis, Mass.

CAPITAL.

Capital authorized by charter,	.	.	.	.	.	.	.	\$1,000 00
Capital authorized by vote of company,	.	.	.	.	.	.	.	5,000 00
Capital paid in, 240 shares; par value, \$25,	.	.	.	.	.	.	.	6,000 00

Whole number of stockholders,	.	.	.	.	.	.	.	13
Number of stockholders resident in Massachusetts,	.	.	.	.	.	.	.	12
Amount of stock held in Massachusetts (shares),	.	.	.	.	.	.	.	239

DEBTS.

Bonds or notes issued, viz.: —

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
Feb. 15, 1911	Aug. 15, 1911	Not secured,	5½	\$200 00
June 28, 1911	Dec. 28, 1911	Not secured,	6	200 00
Total amount of bonds and notes,				\$400 00
Capital paid in,				6,000 00
Total liability for capital and loans,				\$6,400 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Telephone revenue,		\$2,064 16
Operation,	\$1,127 56	
Current maintenance,	355 35	
Total expenses, not including taxes,		1,482 91
Total income above expenses,		\$581 25
Interest on floating debt,	\$23 00	
Taxes,	105 60	
Total charges,		128 60
Surplus of net income above charges,		\$452 65
Dividends declared, 6 per cent. on \$6,000,		360 00
Surplus for year ending June 30, 1911,		\$92 65

EARNINGS.

Exchange service,	\$2,064 16
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EXPENSES.

Operation:—

General:—

Executive department,	\$500 00	
Financial department,	18 62	
Total general,		\$518 62

Commercial:—

Directory,	22 50
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Traffic:—

Operators' wages,	586 44
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Total operation,	\$1,127 56
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Maintenance:—

Repairs:—

Aërial plant,	355 35
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Total expenses, not including taxes,	\$1,482 91
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GENERAL BALANCE SHEET.

Assets.

Exchange construction:—

Overhead lines,	\$5,000 00	
Central office equipment,	200 00	
Subscribers' station equipment,	1,600 00	
Total exchange construction and equipment,		\$6,800 00

Current assets:—

Cash on hand,	\$50 01	
Supplies on hand,	100 00	
Total current assets,		150 01

Total debits,	\$6,950 01
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<i>Liabilities.</i>	<i>Totals.</i>
Capital stock, common,	\$6,000 00
Current liabilities: —	
Loans and notes payable,	400 00
	<hr/>
Total liabilities,	\$6,400 00
Balance, surplus,	550 01
	<hr/>
Total credits,	\$6,950 01

PROFIT AND LOSS ACCOUNT.

	<i>Dr.</i>	<i>Cr.</i>
Balance from previous year,		\$457 36
Gross earnings from operation,		2,064 16
Expenses, not including taxes,	\$1,482 91	
Interest on floating debt,	23 00	
Taxes,	105 60	
Dividends declared on stock,	360 00	
Balance, surplus,	550 01	
	<hr/>	
	\$2,521 52	\$2,521 52

STATISTICAL INFORMATION.

Number of subscribers,	205
Number of instruments,	209
Number of operators,	4
Number of pay stations,	1
Number of subscribers on party lines,	203
Number of subscribers on single lines,	2
Overhead system: —	
Pole line, miles,	35
Iron wire, miles,	216

FALL RIVER AUTOMATIC TELEPHONE COMPANY.

Location of principal business office: 215 Bank Street, Fall River, Mass.

Date of organization: Dec. 7, 1899.

Date of incorporation: Dec. 8, 1899.

State in which incorporated: Massachusetts.

Date of annual meeting: second Monday in April.

Date when company began to give service: Oct. 1, 1901.

Service is given by this company over its own lines in the city of Fall River.

GENERAL OFFICERS AND OFFICIAL TITLES.

Edward B. Jennings,	<i>President.</i>
Bradford D. Davol,	<i>Treasurer.</i>
Clark Chase, Jr.,	<i>Assistant Treasurer and Manager.</i>
Arthur A. Noel,	<i>Superintendent.</i>

DIRECTORS AND RESIDENCES.

Edward B. Jennings,	Fall River, Mass.
Edmund W. Wakelee,	Englewood, N. J.
John T. Swift,	Fall River, Mass.
Joseph Watters,	Fall River, Mass.
Martin Feeney,	Fall River, Mass.
Bradford D. Davol,	Fall River, Mass.
Danforth H. Hathaway,	Fall River, Mass.

CAPITAL.

Capital authorized by charter,	\$135,000 00
Capital authorized by vote of company,	135,000 00
Capital paid in, 2,700 shares; par value, \$50,	135,000 00
Whole number of stockholders,	67
Number of stockholders resident in Massachusetts,	65
Amount of stock held in Massachusetts (shares),	1,924

DEBTS.

Bonds or notes issued, viz.:—

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
June 1, 1903	June 1, 1923	Mortgage on land, buildings, license, franchise and property.	5	\$65,000 00
Total amount of bonds and notes,				\$65,000 00
Capital paid in,				135,000 00
Total liability for capital and loans,				\$200,000 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Gross telephone revenue,		\$29,053 46
Operation,	\$9,310 53	
Current maintenance,	10,025 33	
Depreciation,	468 93	
Total expenses, not including taxes,		19,804 79
Net telephone earnings,		\$9,248 67
Miscellaneous income,		70 71
Total income above expenses,		\$9,319 38
Interest on funded debt,	\$3,250 00	
Taxes,	1,250 35	
Total charges,		4,500 35
Surplus for year ending June 30, 1911,		\$4,819 03

EARNINGS.		
	Items.	Totals.
Gross telephone revenue:—		
Exchange service:—		
Subscribers' stations,	\$28,138 41	
Pay stations,	87 41	
Attachments and rentals,	90 00	
Total exchange service,		\$28,315 82
Toll service,		737 64
Telephone revenue,		\$29,053 46
Miscellaneous income:—		
Interest on bank deposits,		70 71
Total telephone revenue and income,		\$29,124 17

EXPENSES.		
Operation:—		
General:—		
Executive department,	\$1,367 48	
Accounting department,	1,131 87	
Legal department,	1,651 00	
Total general,		\$4,150 35
Commercial:—		
Advertising,	\$193 52	
Canvassing,	1,004 80	
Directory,	135 32	
Revenue collecting,	934 00	
Pay-station commissions,	7 95	
Uncollectible accounts,	405 07	
Total commercial,		2,680 66
Traffic:—		
Service inspection,	\$364 00	
Operators' wages,	930 92	
Light, power and heat,	454 67	
Total traffic,		1,749 59
Rights, privileges and use of property:—		
Rental of instruments,	\$99 00	
Conduit, pole and other space,	75 28	
Total rights, privileges and use of property,		174 28
Insurance,		555 65
Total operation,		\$9,310 53
Maintenance:—		
Repairs:—		
Supervision,	\$1,081 00	
Aërial plant,	5,241 78	
Central office equipment,	229 91	
Subscribers' equipment,	3,472 64	
Total repairs,		10,025 33
Depreciation of plant,		468 93
Total expenses, not including taxes,		\$19,804 79

GENERAL BALANCE SHEET.

<i>Assets.</i>	<i>Items.</i>	<i>Totals.</i>
Exchange construction:—		
Overhead lines,	\$59,268 84	
Underground lines,	72,328 07	
Central office equipment,	25,000 00	
Subscribers' station equipment,	60,755 00	
Total exchange construction and equipment, ———		\$217,351 91
Toll construction:—		
Overhead lines,		3,746 80
Real estate required for operation,		11,166 83
Tools and vehicles,		280 00
Total plant account,		\$232,545 54
Contracts and licenses,		10,000 00
Current assets:—		
Cash on hand,	\$5,246 03	
Accounts receivable,	3,864 95	
Total current assets,		9,110 98
Total debits,		\$251,656 52
<i>Liabilities.</i>		
Capital stock, common,		\$135,000 00
Bonded debt,		65,000 00
Current liabilities:—		
Audited vouchers and accounts,		554 51
Accrued liabilities:—		
Interest accrued but not due,	\$270 83	
Taxes accrued but not due,	945 81	
Total accrued liabilities,		1,216 64
Sinking and other special funds:—		
Reserve for depreciation,		20,004 06
Total liabilities,		\$221,775 21
Balance, surplus,		29,881 31
Total credits,		\$251,656 52

PROFIT AND LOSS ACCOUNT.

	<i>Dr.</i>	<i>Cr.</i>
Balance from previous year,		\$25,062 28
Gross earnings from operation,		29,053 46
Miscellaneous income:—		
Interest on bank deposit,		70 71
Expenses, not including taxes,	\$19,804 79	
Interest on funded debt,	3,250 00	
Taxes,	1,250 35	
Balance, surplus,	29,881 31	
	\$54,186 45	\$54,186 45

PLANT ACCOUNTS (ADDITIONS AND DEDUCTIONS DURING THE YEAR).

<i>Additions.</i>	<i>Totals.</i>
Subscribers' station equipment,	\$791 83

STATISTICAL INFORMATION.

Number of subscribers,	1,043
Number of instruments,	1,177
Number of operators,	2
Number of pay stations,	10
Number of subscribers on party lines,	176
Number of subscribers on single lines,	867
Underground system:—	
Conduit, feet,	18,691.2
Duct, feet,	101,798.4
Cable, feet,	56,971.2
Wire, feet,	10,841,476.8
Overhead system:—	
Pole line, miles,	62.07
Iron wire, miles,	409.72
Copper wire, miles,	1,102.68

HEATH TELEPHONE COMPANY.

Location of principal business office: Shelburne Falls, Mass.

Date of organization: Feb. 14, 1898.

Date of incorporation: Feb. 14, 1898.

State in which incorporated: Massachusetts.

Date of annual meeting: last Monday in October.

Date when company began to give service: Feb. 14, 1898.

Service is given by this company over its own lines in the following towns:—

Ashfield,	Conway,	Monroe,
Buckland,	Hawley,	Rowe,
Charlemont,	Heath,	Shelburne.
Colrain,	Leyden,	

This company also gives service in the State of Vermont.

GENERAL OFFICERS AND OFFICIAL TITLES.

Walter E. Kinsman,	<i>President and General Manager.</i>
Fred W. Story,	<i>Vice-President.</i>
Herbert Newell,	<i>Clerk and Treasurer.</i>

DIRECTORS AND RESIDENCES.

Walter E. Kinsman,	Shelburne Falls, Mass.
Herbert Newell,	Shelburne Falls, Mass.
Fred W. Story,	Boston, Mass.
Jasper N. Keller,	Boston, Mass.
Carl T. Keller,	Boston, Mass.
Matt B. Jones,	Boston, Mass.

Fred H. Smith,	.	.	.	.	.	Ashfield, Mass.
William A. Barber,	.	.	.	.	.	Leyden, Mass.
Alexander J. Patterson,	.	.	.	.	.	Conway, Mass.
Charles L. Donelson,	.	.	.	.	.	Colrain, Mass.
Charles S. Goodnow,	.	.	.	.	.	Whitingham, Vt.

CAPITAL.

Capital authorized by charter,	.	.	.	.	.	\$1,020 00
Capital authorized by vote of company,	.	.	.	.	.	96,000 00
Capital paid in, 3,072 shares; par value, \$30,	.	.	.	.	.	92,160 00
Whole number of stockholders,	.	.	.	.	.	337
Number of stockholders resident in Massachusetts,	.	.	.	.	.	306
Amount of stock held in Massachusetts (shares),	.	.	.	.	.	2,897
Amount of stock held by New England Telephone and Telegraph Company (shares),	.	.	.	.	.	1,196

CONDENSED STATEMENT OF OPERATING FOR THE YEAR (WHOLE SYSTEM).

	Items.	Totals.
Telephone revenue, ¹	.	\$28,960 08
Operation,	\$12,128 00	
Current maintenance,	5,019 24	
Depreciation,	5,760 00	
Total expenses, not including taxes,		22,907 24
Net telephone earnings,	.	\$6,052 84
Miscellaneous income,	.	24 20
Total income above expenses,	.	\$6,077 04
Interest charges and taxes:—		
Interest on floating debt,	\$9 26	
Taxes,	1,519 12	
Total charges,		1,528 38
Surplus of net income above charges,	.	\$4,548 66
Total dividends declared,	.	3,685 00
Surplus for year ending June 30, 1911,	.	\$863 66

EARNINGS (WHOLE SYSTEM).

Gross telephone revenue:—

Exchange service:—

Subscribers' stations,	.	.	.	.	\$21,163 61
Pay stations,	.	.	.	.	349 40
Total exchange service,	.	.	.	.	\$21,513 01
Toll service,	.	.	.	.	7,447 07
Total gross telephone revenue,	.	.	.	.	\$28,960 08
Other miscellaneous income,	.	.	.	.	24 20
Total telephone revenue and income,	.	.	.	.	\$28,984 28

¹ Telephone revenue in Massachusetts, \$22,500.72.

EXPENSES (WHOLE SYSTEM).

Operation:—	Items.	Totals.
General:—		
Executive, accounting and financial departments,	\$2,131 61	
Legal department,	5 48	
Total general,		\$2,137 09
Commercial:—		
Canvassing,	\$92 50	
Directory,	16 54	
Revenue accounting,	813 35	
Revenue collecting,	676 35	
Total commercial,		1,598 74
Traffic:—		
Traffic supervision and service inspection,	\$1,200 50	
Operators' wages,	6,125 42	
Central office rent,	648 88	
Other operating expenses,	46 02	
Total traffic,		8,020 82
Rights, privileges and use of property:—		
Rental of instruments,	\$168 94	
Conduit, pole and other space,	202 41	
Total rights, privileges and use of property,		371 35
Total operation,		\$12,128 00
Maintenance:—		
Repairs:—		
Aërial plant,	\$2,453 62	
Central office equipment,	514 29	
Subscribers' equipment,	2,051 33	
Total repairs,		5,019 24
Depreciation of plant,		5,760 00
Total expenses, not including taxes,		\$22,907 24

GENERAL BALANCE SHEET.

<i>Assets.</i>		
Exchange construction,		\$97,784 91
Office furniture and fixtures,		517 38
Tools and vehicles,		175 61
Total plant account,		\$98,477 90
Current assets:—		
Cash on hand,	\$2,845 16	
Accounts receivable,	4,113 26	
Supplies on hand,	1,356 84	
Heath telephone stock,	480 00	
Total current assets,		8,795 26
Total debits,		\$107,273 16

<i>Liabilities.</i>	<i>Items.</i>	<i>Totals.</i>
Capital stock, common,		\$92,160 00
Current liabilities:—		
Audited vouchers and accounts,	\$268 76	
Salaries and wages unpaid,	97 50	
Total current liabilities,		366 26
Sinking and other special funds:—		
Replacement reserve,		8,776 72
		<hr/>
Total liabilities,		\$101,302 98
Balance, surplus,		5,970 18
		<hr/>
Total credits,		\$107,273 16

PROFIT AND LOSS ACCOUNT.

	<i>Dr.</i>	<i>Cr.</i>
Balance from previous year,		\$5,178 89
Gross earnings from operation,		28,960 08
4 per cent. dividend on stock of Heath Telephone Company, par value, \$480,		19 20
Miscellaneous income,		5 00
Expenses, not including taxes,	\$22,907 24	
Interest on floating debt,	9 26	
Taxes,	1,519 12	
For depreciation:—		
Office furniture, tools and teams,	72 37	
Dividends declared on stock:—		
4 per cent. due Aug. 10, 1910,	3,685 00	
Balance, surplus,	5,970 18	
	<hr/>	<hr/>
	\$34,163 17	\$34,163 17

PLANT ACCOUNTS (ADDITIONS AND DEDUCTIONS DURING THE YEAR).

<i>Additions.</i>	<i>Totals.</i>
Exchange construction,	\$1,527 77
Office furniture and fixtures,	91 43
Tools and vehicles,	59 70
	<hr/>
Total additions,	\$1,678 90
<i>Deductions.</i>	
Tools, teams, and furniture fixtures,	72 37
	<hr/>
Net additions to plant account for the year,	\$1,606 53

STATISTICAL INFORMATION.

	In Massachusetts.	Outside Massachusetts.	Whole System.
Number of subscribers,	973	285	1,258
Number of instruments,	1,024	311	1,335
Number of operators,	16	6	22
Number of pay stations,	25	6	31
Number of subscribers on party lines,	964	281	1,245
Number of subscribers on single lines,	9	4	13
Overhead system:—			
Pole line, miles,	283.5	115.25	398.75
Iron wire, miles,	1,355	403	1,758
Copper wire, miles,	78.5	5.5	84

MASSACHUSETTS TELEPHONE AND TELEGRAPH COMPANY.

Location of principal business office: 185 Franklin Street, Boston, Mass.

Date of organization: about Nov. 15, 1898.

Date of incorporation: about Nov. 15, 1898.

State in which incorporated: Massachusetts.

Date of annual meeting: first Monday in November.

Date when company began to give service: 1899.

Service is given by this company over its own lines in Boston, Stoughton and Taunton.

GENERAL OFFICERS AND OFFICIAL TITLES.

A. Norton Taylor, *President.*
 William Shirden, *Secretary and Treasurer.*

DIRECTORS AND RESIDENCES.

A. Norton Taylor, Newark, N. J.
 Fred Jones, Jersey City, N. J.
 William Shirden, New York, N. Y.
 Joseph Q. Taylor, Taunton, Mass.
 Dudley G. Browning, Newark, N. J.

CAPITAL.

Capital authorized by charter, \$10,000 00
 Capital authorized by vote of company, 10,000 00
 Capital paid in, 100 shares; par value, \$100, 10,000 00

Whole number of stockholders, 6
 Number of stockholders resident in Massachusetts, 1
 Amount of stock held in Massachusetts (share), 1
 Amount of stock held by parent telephone company (shares), 80

DEBTS.

Bonds or notes issued, viz.:—

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
May 4, 1906	On demand, .	Bonds (when issued),	5	\$3,430 00
June 6, 1906	On demand, .	Bonds (when issued),	5	1,750 00
July 8, 1906	On demand, .	Bonds (when issued),	5	1,385 00
Aug. 4, 1906	On demand, .	Bonds (when issued),	5	1,402 00
Sept. 7, 1906	On demand, .	Bonds (when issued),	5	1,675 00
Oct. 6, 1906	On demand, .	Bonds (when issued),	5	1,638 00
Nov. 3, 1906	On demand, .	Bonds (when issued),	5	4,500 00
Dec. 10, 1906	On demand, .	Bonds (when issued),	5	1,337 79
Jan. 3, 1907	On demand, .	Bonds (when issued),	5	4,000 00
Feb. 6, 1907	On demand, .	Bonds (when issued),	5	2,100 00
March 7, 1907	On demand, .	Bonds (when issued),	5	1,600 00
April 4, 1907	On demand, .	Bonds (when issued),	5	1,500 00
May 8, 1907	On demand, .	Bonds (when issued),	5	1,500 00
June 5, 1907	On demand, .	Bonds (when issued),	5	1,800 00
July 6, 1907	On demand, .	Bonds (when issued),	5	1,500 00
Aug. 8, 1907	On demand, .	Bonds (when issued),	5	1,600 00
Sept. 4, 1907	On demand, .	Bonds (when issued),	5	1,600 00
Oct. 5, 1907	On demand, .	Bonds (when issued),	5	5,000 00
Nov. 4, 1907	On demand, .	Bonds (when issued),	5	1,600 00
Dec. 16, 1907	On demand, .	Bonds (when issued),	5	1,500 00
Jan. 10, 1908	On demand, .	Bonds (when issued),	5	3,500 00
Feb. 8, 1908	On demand, .	Bonds (when issued),	5	1,600 00
March 4, 1908	On demand, .	Bonds (when issued),	5	1,600 00
April 4, 1908	On demand, .	Bonds (when issued),	5	1,600 00
May 7, 1908	On demand, .	Bonds (when issued),	5	1,500 00
June 1, 1908	On demand, .	Bonds (when issued),	5	1,800 00
July 7, 1908	On demand, .	Bonds (when issued),	5	1,600 00
Aug. 7, 1908	On demand, .	Bonds (when issued),	5	1,800 00
Sept. 12, 1908	On demand, .	Bonds (when issued),	5	1,600 00
Oct. 26, 1908	On demand, .	Bonds (when issued),	5	3,500 00
Oct. 10, 1908	On demand, .	Bonds (when issued),	5	1,600 00
Nov. 7, 1908	On demand, .	Bonds (when issued),	5	1,600 00
Dec. 5, 1908	On demand, .	Bonds (when issued),	5	1,600 00
Jan. 6, 1909	On demand, .	Bonds (when issued),	5	1,600 00
Feb. 9, 1909	On demand, .	Bonds (when issued),	5	1,600 00
March 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
April 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
May 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
June 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
July 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
Aug. 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
Sept. 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
Oct. 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
Nov. 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
Dec. 1, 1909	On demand, .	Bonds (when issued),	5	1,600 00
Jan. 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
Feb. 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
March 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
April 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
May 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
June 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
July 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
Aug. 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
Sept. 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
Oct. 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
Nov. 1, 1910	On demand, .	Bonds (when issued),	5	1,600 00
Jan. 1, 1911	On demand, .	Bonds (when issued),	5	1,600 00
Feb. 1, 1911	On demand, .	Bonds (when issued),	5	1,600 00
March 1, 1911	On demand, .	Bonds (when issued),	5	1,600 00
April 1, 1911	On demand, .	Bonds (when issued),	5	1,600 00
May 1, 1911	On demand, .	Bonds (when issued),	5	1,600 00
June 1, 1911	On demand, .	Bonds (when issued),	5	1,600 00
Total amount of bonds and notes,				\$113,717 79
Capital paid in,				10,000 00
Total liability for capital and loans,				\$123,717 79

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Telephone revenue,		\$4,795 43
Operation,	\$7,814 81	
Current maintenance,	7,472 41	
<hr/>		
Total expenses not including taxes,		15,287 22
<hr/>		
Net telephone deficit,		\$10,491 79
Miscellaneous deficit,		6,970 88
<hr/>		
Total deficit above income,		\$17,462 67
Taxes,		182 99
<hr/>		
Deficit for year ending June 30, 1911,		\$17,645 69

EARNINGS.

Gross telephone revenue: —		
Exchange service: —		
Subscribers' stations,	\$4,495 43	
Subway and pole rental,	300 00	
Total exchange service,	<hr/>	\$4,795 43
Real estate deficit,		6,970 88
<hr/>		
Total telephone and income deficit,		\$2,175 45

EXPENSES.

Operation: —		
General: —		
Accounting department,	\$400 00	
Legal department,	2,258 50	
Total general,	<hr/>	\$2,658 50
Commercial: —		
Uncollectible accounts,		\$440 31
Traffic: —		
Operators' wages,	\$1,300 00	
Operating clerical wages,	1,916 00	
Central office rent,	1,500 00	
Total traffic,	<hr/>	4,716 00
<hr/>		
Total operation,		\$7,814 81
Repairs,		7,472 41
<hr/>		
Total expenses, not including taxes,		\$15,287 22

GENERAL BALANCE SHEET.

Assets.

Exchange construction: —		
Overhead lines,	\$13,461 60	
Underground lines,	92,872 41	
Central office equipment,	14,613 00	
Subscribers' station equipment,	4,059 00	
Total exchange construction and equipment, <hr/>		\$125,006 01
<hr/>		
Amount carried forward,		\$125,006 01

	Items.	Totals.
<i>Amount brought forward,</i>		\$125,006 01
Toll construction: —		
Underground lines,		20,718 25
Office furniture and fixtures,		2,328 00
Tools and vehicles,		144 95
Total plant account,		\$148,197 21
Current assets: —		
Cash on hand,	\$2,370 76	
Notes and accounts receivable,	1,977 55	
Supplies on hand,	3,000 09	
Total current assets,		7,348 40
Total debits,		\$155,545 61
<i>Liabilities.</i>		
Capital stock,		\$10,000 00
Current liabilities: —		
Loans and notes payable,		113,717 79
Balance, surplus,		31,827 82
Total credits,		\$155,545 61

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,		\$49,473 48
Gross earnings from operation,		4,495 43
Pole rental,		300 00
Real estate revenue (subrentals),		21,749 50
Expenses, not including taxes,	\$15,287 22	
Taxes,	182 99	
Other items: —		
Operating and maintenance of leased building,	24,384 50	
Taxes and insurance on building,	4,335 88	
Balance, surplus,	31,827 82	
	\$76,018 41	\$76,018 41

STATISTICAL INFORMATION.

Number of subscribers,	257
Number of instruments,	257
Number of operators,	7
Number of subscribers on party lines,	122
Number of subscribers on single lines,	135
Underground system: —	
Conduit, feet,	20,299
Duct, feet,	284,598
Cable, feet,	31,761
Wire, feet,	2,935,225
Overhead system: —	
Pole line, miles,	60.5
Iron wire, miles,	308

NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY.

Location of principal business office: 50 Oliver Street, Boston, Mass.

Date of organization: Oct. 19, 1883.

Date of incorporation: Oct. 19, 1883.

State in which incorporated: New York.

Date of annual meeting: first Monday in May.

Date when company began to give service: October, 1883.

Cities and towns in Massachusetts in which service is given by the company over its own lines: —

Acton,	Chicopee,	Hardwick,
Adams,	Clarksburg,	Harvard,
Agawam,	Clinton,	Hatfield,
Alford,	Cohasset,	Haverhill,
Amesbury,	Concord,	Hawley,
Amherst,	Conway,	Hingham,
Andover,	Cummington,	Hinsdale,
Arlington,	Dalton,	Holbrook,
Ashburnham,	Dana,	Holden,
Ashby,	Danvers,	Holland,
Ashfield,	Dedham,	Holliston,
Ashland,	Deerfield,	Holyoke,
Athol,	Douglas,	Hopedale,
Auburn,	Dover,	Hopkinton,
Ayer,	Dracut,	Hubbardston,
Barre,	Dudley,	Hudson,
Becket,	Dunstable,	Hull,
Bedford,	Easthampton,	Huntington,
Belchertown,	East Longmeadow,	Hyde Park,
Bellingham,	Egremont,	Ipswich,
Belmont,	Enfield,	Lancaster,
Berlin,	Erving,	Lanesborough,
Bernardston,	Essex,	Lawrence,
Beverly,	Everett,	Lee,
Billerica,	Fitchburg,	Leicester,
Blandford,	Florida,	Lenox,
Bolton,	Foxborough,	Leominster,
Boston,	Framingham,	Lexington,
Boxborough,	Franklin,	Leyden,
Boxford,	Gardner,	Lincoln,
Boylston,	Georgetown,	Littleton,
Braintree,	Gloucester,	Longmeadow,
Brimfield,	Goshen,	Lowell,
Brookfield,	Grafton,	Ludlow,
Brookline,	Granby,	Lunenburg,
Burlington,	Granville,	Lynn,
Cambridge,	Great Barrington,	Lynnfield,
Canton,	Greenfield,	Malden,
Carlisle,	Greenwich,	Manchester,
Charlton,	Groton,	Marblehead,
Chelmsford,	Groveland,	Marlborough,
Chelsea,	Hadley,	Maynard,
Cheshire,	Hamilton,	Medfield,
Chester,	Hampden,	Medford,
Chesterfield,	Hancock,	Medway,

Melrose,	Plainfield,	Townsend,
Mendon,	Princeton,	Tyngsborough,
Merrimac,	Quincy,	Tyringham,
Methuen,	Randolph,	Upton,
Middlefield,	Reading,	Uxbridge,
Middleton,	Revere,	Wakefield,
Milford,	Rockport,	Wales,
Millbury,	Rowley,	Walpole,
Millis,	Royalston,	Waltham,
Milton,	Russell,	Ware,
Monson,	Rutland,	Warren,
Montague,	Salem,	Warwick,
Monterey,	Salisbury,	Washington,
Montgomery,	Sandisfield,	Watertown,
Nahant,	Saugus,	Wayland,
Natick,	Savoy,	Webster,
Needham,	Sharon,	Wellesley,
New Ashford,	Sheffield,	Wendell,
New Braintree,	Shelburne,	Wenham,
New Marlborough,	Sherborn,	West Boylston,
Newbury,	Shirley,	West Brookfield,
Newburyport,	Shrewsbury,	West Newbury,
Newton,	Shutesbury,	West Springfield,
Norfolk,	Somerville,	West Stockbridge,
North Adams,	Southampton,	Westborough,
North Andover,	South Hadley,	Westfield,
North Brookfield,	Southborough,	Westford,
North Reading,	Southbridge,	Westhampton,
Northampton,	Southwick,	Westminster,
Northborough,	Spencer,	Weston,
Northbridge,	Springfield,	Westwood,
Northfield,	Sterling,	Weymouth,
Norwood,	Stockbridge,	Whately,
Orange,	Stoneham,	Wilbraham,
Otis,	Stoughton,	Williamsburg,
Oxford,	Stow,	Williamstown,
Palmer,	Sturbridge,	Wilmington,
Paxton,	Sudbury,	Winchendon,
Peabody,	Sunderland,	Winchester,
Pelham,	Sutton,	Windsor,
Pepperell,	Swampscott,	Winthrop,
Peru,	Templeton,	Woburn,
Petersham,	Tewksbury,	Worcester,
Phillipston,	Tolland,	Worthington,
Pittsfield,	Topsfield,	Wrentham.

This company also gives service in the States of Maine, New Hampshire and Vermont.

GENERAL OFFICERS AND OFFICIAL TITLES.

Thomas Sherwin,	.	.	.	.	.	<i>Chairman, Board of Directors.</i>
Jasper N. Keller,	.	.	.	.	.	<i>President.</i>
Henry S. Hyde,	.	.	.	.	.	<i>Vice-President.</i>
Francis A. Houston,	.	.	.	.	.	<i>Vice-President and General Manager.</i>
William J. Denver,	.	.	.	.	.	<i>Assistant General Manager.</i>
William R. Driver,	.	.	.	.	.	<i>Treasurer.</i>
Edmund S. Willard,	.	.	.	.	.	<i>Assistant Treasurer.</i>

Matt B. Jones,	<i>Counsel.</i>
Edmund W. Longley,	<i>Secretary, Auditor and Comptroller.</i>
Leslie D. Knowlton,	<i>Auditor of disbursements.</i>
Ralph B. Jones,	<i>Auditor of receipts.</i>
Fred W. Story,	<i>Assistant to the Vice-President.</i>
Edward A. Wilkie,	<i>Recorder.</i>

DIRECTORS AND RESIDENCES.

Thomas Sherwin,	Jamaica Plain, Mass.
Charles F. Ayer,	Boston, Mass.
Union N. Bethell,	Montclair, N. J.
John H. Cahill,	New York, N. Y.
William J. Denver,	Roxbury, Mass.
Francis H. Dewey,	Worcester, Mass.
William H. Elliot,	Keene, N. H.
Edward J. Hall,	Morristown, N. J.
John F. Hill,	Augusta, Me.
Henry S. Hyde,	Springfield, Mass.
Matt B. Jones,	Newton, Mass.
Jasper N. Keller,	Surry, N. H.
Moses G. Parker,	Lowell, Mass.
Fletcher D. Proctor,	Proctor, Vt.
Theodore N. Vail,	Lyndonville, Vt.

CAPITAL.

Capital authorized by articles of association, and increased from time to time under the general laws,	\$50,000,000 00
Capital authorized by vote of company,	39,178,100 00
Capital paid in, 391,781 shares; par value, \$100,	39,178,100 00

Whole number of stockholders,	4,053
Number of stockholders resident in Massachusetts,	3,581
Amount of stock held in Massachusetts, not including stock held by "Parent Co." (shares),	149,389
Amount of stock held by parent telephone company (shares),	228,866

DEBTS.

Bonds or notes issued, viz.: —

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
<i>Bonds.</i>				
April 1, 1891	April 1, 1906	Debenture,	None.	\$5,000 00
April 1, 1895	April 1, 1915	Debenture,	5	500,000 00
April 1, 1896	April 1, 1916	Debenture,	5	500,000 00
April 1, 1899	April 1, 1919	Debenture,	5	500,000 00
Jan. 1, 1900	Jan. 1, 1930	Debenture,	4	1,000,000 00
Total amount of bonds and notes,				\$2,505,000 00
Capital paid in,				39,178,100 00
Total liability for capital and loans,				\$41,683,100 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR (WHOLE SYSTEM).

	Items.	Totals.
Gross telephone revenue, ¹		\$13,104,286 99
Less rebates and discounts,		19,065 71
Telephone revenue,		\$13,085,221 28
Operation,	\$5,275,271 47	
Current maintenance,	1,756,454 40	
Depreciation,	2,557,046 54	
Total expenses, not including taxes,		9,588,772 41
Net telephone earnings,		\$3,496,448 87
Miscellaneous income,		330,971 17
Total income above expenses,		\$3,827,420 04
Interest charges and taxes:—		
Interest on funded debt,	\$115,000 00	
Interest on floating debt,	3,887 48	
Taxes,	820,427 03	
Total charges,		939,314 51
Surplus of net income above charges,		\$2,888,105 53
Dividends declared:—		
6½ per cent. on \$39,178,100, common,		2,448,631 25
Surplus for year ending June 30, 1911,		\$439,474 28
Depreciation stocks and bonds,		200,000 00
		\$239,474 28

EARNINGS (WHOLE SYSTEM).

Gross telephone revenue:—	
Exchange service:—	
Subscribers' stations,	\$9,290,074 65
Pay stations,	577,212 76
Attachments and rentals,	40,270 61
Miscellaneous exchange earnings,	666 08
Total exchange service,	\$9,908,224 10
Toll service:—	
Toll service,	\$3,019,134 21
Attachments and rentals,	56,375 08
Total toll service,	3,075,509 29
Private line:—	
Rental instruments and equipment,	58,714 33
Sublicensee:—	
Rental instruments and equipments,	61,839 27
Total gross telephone revenue,	\$13,104,286 99
Less rebates and discounts,	19,065 71
Telephone revenue,	\$13,085,221 28
Amount carried forward,	\$13,085,221 28

¹ Gross telephone revenue and income in Massachusetts (see note on page 183):—

Gross telephone revenue,	\$10,792,125 99
Less rebates and discounts,	7,258 51
Telephone revenue,	\$10,784,867 48
Miscellaneous income,	272,094 95
Total telephone revenue and income,	\$11,056,962 43

	Items.	Totals.
<i>Amount brought forward,</i>		\$13,085,221 28
Gross telephone revenue — <i>Concluded.</i>		
Miscellaneous income: —		
Real estate revenue,	\$10,941 94	
Dividends on stocks of other companies,	73,815 43	
Interest on bonds and notes and running accounts,	168,280 17	
Interest on bank deposits,	67,290 77	
Sales and job work above field cost,	10,642 86	
Total miscellaneous income,		330,971 17
Total telephone revenue and income,		\$13,416,192 45

EXPENSES (WHOLE SYSTEM).

Operation: —

General: —

Executive department,	\$140,648 74	
Accounting department,	97,258 76	
Financial department,	37,335 52	
Legal department,	84,187 12	
Total general,		\$359,430 14

Commercial: —

Commercial supervision,	\$260,405 38	
Advertising,	142,624 58	
Canvassing,	224,197 51	
Directory,	174,503 94	
Revenue accounting,	288,675 83	
Revenue collecting,	317,423 09	
Pay-station commissions,	164,725 57	
Sublicensee relations,	42,675 34	
Uncollectible accounts,	22,265 05	
Total commercial,		1,637,496 29

Traffic: —

Traffic supervision,	\$257,176 81	
Service inspection,	80,697 58	
Operators' wages,	1,605,257 28	
Operating clerical wages,	76,342 10	
Rest and lunch rooms,	56,306 50	
Operators' schooling,	68,445 79	
Central office rent,	208,599 85	
Pay-station expense,	49,852 75	
Other operating expenses,	111,372 96	
Total traffic,		2,514,051 62

Rights, privileges and use of property: —

Rental of instruments,	\$590,026 07	
Conduit, pole and other space,	136,736 89	
Total rights, privileges and use of property,		726,762 96
Insurance,		37,530 46

Total operation, \$5,275,271 47

Maintenance: —

Repairs: —

Supervision,	\$196,507 05	
Aërial plant,	468,678 78	

Amounts carried forward, \$665,185 83 \$5,275,271 47

	Items.	Totals.
<i>Amounts brought forward,</i>	\$665,185 83	\$5,275,271 47
Maintenance — <i>Concluded.</i>		
Repairs — <i>Concluded.</i>		
Underground plant,	123,250 51	
Central office equipment,	269,849 35	
Subscribers' equipment,	357,288 28	
Real estate,	14,071 32	
Total repairs,	\$1,429,645 29	
Station removals and changes,	326,809 11	
Total current maintenance,		¹ 1,756,454 40
Depreciation of plant,		2,557,046 54
Total expenses not including taxes,		² \$9,588,772 41

GENERAL BALANCE SHEET.

Assets.

Exchange construction: —		
Right of way,	\$404,598 23	
Overhead lines,	8,330,319 43	
Underground lines,	8,322,306 83	
Submarine lines,	42,940 50	
Central office equipment,	4,627,434 20	
Subscribers' station equipment,	5,849,355 25	
Total exchange construction and equipment, ————		\$27,576,954 44
Toll construction: —		
Right of way,	\$323,593 66	
Overhead lines,	6,042,576 43	
Underground lines,	4,836,675 81	
Submarine lines,	59,428 59	
Total toll construction,		11,262,274 49
Construction in process,		2,626,963 56
Real estate required for operation,		2,092,984 34
Investment real estate not required for operation,		110,822 67
Office furniture and fixtures,		296,715 30
Tools and vehicles,		291,398 37
Total plant account,		\$44,258,113 17
Securities of other companies,		2,291,381 52
Current assets: —		
Cash on hand,	\$1,174,382 50	
Notes receivable,	2,175,388 69	
Accounts receivable,	\$2,616,555 90	
Less uncollectible reserve,	155,484 87	
	2,461,071 03	
Supplies on hand,	1,741,481 07	
Unexpired insurance,	38,698 73	
<i>Amounts carried forward,</i>	\$7,591,022 02	\$46,549,494 69

¹ Total current maintenance includes station renewals and charges, which account in 1910 was included in reconstruction.

² In report of 1910, total of all operating expenses included taxes.

	Items.	Totals.
<i>Amounts brought forward,</i>	\$7,591,022 02	\$46,549,494 69
<i>Current assets — Concluded.</i>		
Prepaid directory expense,	7,631 11	
Treasury bonds,	55,000 00	
Total current assets,	<hr/>	7,653,653 13
Total debits,		<hr/> \$54,203,147 82

Liabilities.

Capital stock, common,		\$39,178,100 00
Bonded debt,		2,505,000 00
<i>Current liabilities: —</i>		
Audited vouchers and accounts,	\$600,432 31	
Salaries and wages, unpaid,	320 89	
Dividends not called for,	2,113 50	
Unearned subscribers' rentals,	61,572 10	
Unearned tolls,	563 85	
Total current liabilities,	<hr/>	665,002 65
<i>Accrued liabilities: —</i>		
Interest accrued but not due,	\$38,750 00	
Taxes accrued but not due,	375,886 46	
Vouchers and accounts accrued but not due,	74,636 79	
Total accrued liabilities,	<hr/>	489,273 25
<i>Sinking and other special funds: —</i>		
Maintenance,	\$5,592,280 13	
Fire insurance,	248,690 27	
Accident insurance,	153,126 08	
Bond discount,	5,930 39	
To meet plant supervisory expense,	18,224 86	
To meet stable and garage expense,	1,130 23	
To meet supply department expense,	26,922 98	
	<hr/>	6,046,304 94
1908 inventory adjustment,		1,640,155 49
Total liabilities,		<hr/> \$50,523,836 33
Balance, surplus,		3,679,311 49
Total credits,		<hr/> \$54,203,147 82

PROFIT AND LOSS ACCOUNT.

	Cr.
Balance from previous year,	\$3,439,837 21
Gross earnings from operation,	13,104,286 99
Real estate revenue,	10,941 94
Dividends received on stock owned by company,	73,815 43
Interest received on bonds and notes,	131,871 94
Interest on running accounts,	36,169 23
Interest on bank balances,	67,290 77
Interest on N. E. T. & T. Co. bonds,	225 00
Interest on stock sold,	14 00
Sales and job work above field cost,	10,642 86
<i>Amount carried forward,</i>	<hr/> \$16,875,095 37

	Dr.	Cr.
<i>Amount brought forward,</i>		\$16,875,095 37
Expenses, not including taxes,	\$9,588,772 41	
Rebates and discounts,	19,065 71	
Interest on funded debt,	115,000 00	
Interest on floating debt,	3,887 48	
Taxes,	820,427 03	
For depreciation, stocks and bonds,	200,000 00	
Dividends declared on stock,	2,448,631 25	
Balance, surplus,	3,679,311 49	
		<hr/>
	\$16,875,095 37	\$16,875,095 37

PLANT ACCOUNTS (ADDITIONS AND DEDUCTIONS DURING THE YEAR).

<i>Additions.</i>	<i>Items.</i>	<i>Totals.</i>
Exchange construction:—		
Right of way,	\$19,922 91	
Overhead lines,	603,832 91	
Underground lines,	356,631 22	
Submarine lines,	2,002 56	
Central office equipment,	54,420 73	
Subscribers' station equipment,	574,570 32	
Total exchange construction and equipment,		\$1,611,380 65
Toll construction:—		
Right of way,	\$47,775 42	
Overhead lines,	168,486 34	
Underground lines,	64,481 80	
Submarine lines, ¹	5,687 54	
Total toll construction,		275,056 02
Construction in process,		1,454,159 10
Real estate required for operation,		631,395 59
Investment real estate not required for operation, ¹		6,958 09
Office furniture and fixtures,		49,296 58
Tools and vehicles,		72,566 26
		<hr/>
Total additions,		\$4,086,896 11
<i>Deductions.</i>		
Property sold:—		
Exchange overhead lines,	\$41,904 06	
Exchange underground lines,	2,161 51	
Central office equipment,	3,532 97	
Subscribers' station equipment,	9,473 38	
Toll overhead lines,	6,336 23	
Toll underground lines,	27 09	
Real estate,	49,724 45	
Total deductions,		113,159 69
		<hr/>
Net additions to plant account for the year,		\$3,973,736 42

¹ Credit item.

. STATISTICAL INFORMATION.

	Boston and Suburban Division.	Massa- chusetts, Outside Boston and Suburban Division.	All Massa- chusetts.	Outside of Massa- chusetts.	Whole System.
Number of subscribers, . . .	127,192	108,959	236,151	64,568	300,719
Number of stations, . . .	130,819	111,897	242,716	66,452	309,168
Number of operators, . . .	2,133	1,073	3,206	700	3,906
Number of pay stations, . . .	3,627	2,938	6,565	1,884	8,449
Number of subscribers on party lines,	102,810	94,313	197,123	57,751	254,874
Number of subscribers on single lines,	24,382	14,646	39,028	6,817	45,845
Underground system: —					
Conduit, feet, . . .	1,520,722	1,390,242	2,910,964	368,861	3,279,825
Duct, feet, . . .	8,843,804	5,523,329	14,367,133	1,569,521	15,936,654
Cable, feet, . . .	4,367,695	2,990,037	7,357,732	851,186	8,208,918
Wire, miles, . . .	273,602	139,617	413,219	44,595	457,814
Submarine system: —					
Cable, feet, . . .	20,722	8,472	29,194	111,321	140,515
Wire, miles, . . .	479	156	635	642	1,277
Overhead system: —					
Pole line, miles, . . .	1,139	5,680	6,819	8,942	15,761
Iron wire, miles, . . .	60,813	78,365	139,178	71,367	210,545
Copper wire, miles, . . .	1,743	27,130	28,873	36,592	65,465

GENERAL REMARKS AND EXPLANATIONS.

"The revenue within the State which is here reported is the revenue which has been collected within the State of Massachusetts. No deduction has been made for such portion of tolls as were collected within the State, but transmitted partly over lines lying without the State. Neither has the separation been made of tolls originating at points outside of the territory of the New England Telephone and Telegraph Company but terminating at points within such territory.

"If such separation were made, it would probably show that a considerable sum collected within the State of Massachusetts had been earned on toll lines located outside of that State."

PROVIDENCE TELEPHONE COMPANY OF MASSACHUSETTS.

Location of principal business office: 125 Milk Street, Boston, Mass.

Date of organization: Dec. 2, 1890.

Date of incorporation: Feb. 24, 1891.

State in which incorporated: Massachusetts.

Date of annual meeting: first Tuesday in December.

Date when company began to give service: April 28, 1891.

Service is given by this company over its own lines in the towns of

Attleborough,	North Attleborough,	Rehoboth,
Bellingham,	Norton,	Seekonk,
Blackstone,	Plainville,	Swansea.

GENERAL OFFICERS AND OFFICIAL TITLES.

Dexter B. Potter,	.	.	.	.	.	<i>President.</i>
Charles T. Howard,	.	.	.	.	.	<i>Treasurer.</i>
Joseph F. Beck,	.	.	.	.	.	<i>General Manager.</i>
Robert W. Devonshire,	.	.	.	.	.	<i>Clerk.</i>

DIRECTORS AND RESIDENCES.

Dexter B. Potter,	.	.	.	.	.	Providence, R. I.
Charles T. Howard,	.	.	.	.	.	Coventry, R. I.
Joseph F. Beck,	.	.	.	.	.	Providence, R. I.
Robert W. Devonshire,	.	.	.	.	.	Boston, Mass.
Thomas Sherwin,	.	.	.	.	.	Boston, Mass.

CAPITAL.

Capital authorized by charter,	.	.	.	.	.	\$10,000 00
Capital authorized by vote of company,	.	.	.	.	.	80,000 00
Capital paid in, 800 shares; par value, \$100,	.	.	.	.	.	80,000 00

Whole number of stockholders,	.	.	.	.	.	6
Number of stockholders resident in Massachusetts,	.	.	.	.	.	2
Amount of stock held in Massachusetts (shares),	.	.	.	.	.	2
Amount of stock held by parent telephone company (shares),	.	.	.	.	.	795

DEBTS.

Bonds or notes issued, viz.: —

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
April 17, 1911	July 1, 1911	- - -	5	\$10,000 00
Total amount of bonds and notes,				\$10,000 00
Capital paid in,				80,000 00
Total liability for capital and loans,				\$90,000 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Gross telephone revenue,	\$62,675 08	
Less rebates and discounts,	469 74	
Telephone revenue,		\$62,205 34
Operation,	\$25,671 45	
Current maintenance,	11,026 50	
Depreciation,	13,700 00	
Total expenses, not including taxes,		50,397 95
Net telephone earnings,		\$11,807 39
Miscellaneous income,		259 39
Total income above expenses,		\$12,066 78
Interest charges and taxes:—		
Interest on floating debt,	\$1,053 16	
Taxes,	2,196 28	
Total charges,		3,249 44
Surplus of net income above charges,		\$8,817 34
Dividends declared:—		
5 per cent. on \$80,000,		4,000 00
Surplus for year ending June 30, 1911,		\$4,817 34

EARNINGS.

Gross telephone revenue:—		
Exchange service:—		
Subscribers' stations,	\$51,997 47	
Pay stations,	1,449 13	
Attachments and rentals,	56 83	
Total exchange service,		\$53,503 43
Toll service:—		
Toll service,		9,171 65
Total gross telephone revenue,		\$62,675 08
Less rebates and discounts,		469 74
Telephone revenue,		\$62,205 34
Miscellaneous income:—		
Interest on deposits,		259 36
Total telephone revenue and income,		\$62,464 73

EXPENSES.

Operation:—		
General:—		
Executive department,	\$1,200 00	
Accounting department,	490 82	
Financial department,	480 87	
Legal department,	20 75	
Inventory,	74 27	
Total general,		\$2,266 71
Amount carried forward,		\$2,266 71

	Items.	Totals.
<i>Amount brought forward,</i>		\$2,266 71
Operation — Concluded.		
Commercial:—		
Commercial supervision,	\$1,421 50	
Advertising,	178 21	
Canvassing,	480 00	
Directory,	1,273 63	
Revenue accounting,	1,698 54	
Revenue collecting,	980 66	
Pay-station commissions,	768 54	
Total commercial,		6,801 08
Traffic:—		
Traffic supervision,	\$1,387 41	
Operators' wages,	9,050 10	
Central office rent,	1,807 92	
Other operating expenses,	702 48	
Total traffic,		12,947 91
Rights, privileges and use of property:—		
Rental of instruments,	\$2,742 39	
Conduit, pole and other space,	531 96	
Total rights, privileges and use of property,		3,274 35
Insurance,		381 40
Total operation,		\$25,671 45
Maintenance:—		
Repairs:—		
Supervision,	\$1,744 41	
Aërial plant,	2,651 02	
Underground plant,	378 83	
Central office equipment,	1,942 19	
Subscribers' equipment,	3,349 49	
Real estate,	24 47	
Total repairs,	\$10,090 41	
Station removals and changes,	936 09	
Total current maintenance,		11,026 50
Depreciation of plant,		13,700 00
Total expenses, not including taxes,		\$50,397 95

GENERAL BALANCE SHEET.

Assets.

Exchange construction:—		
Overhead lines,	\$36,978 43	
Underground lines,	34,731 49	
Central office equipment,	16,987 64	
Subscribers' station equipment,	25,334 48	
Total exchange construction and equipment,		\$114,032 04
Toll construction:—		
Overhead lines,	\$18,540 95	
Underground lines,	4,238 23	
Total toll construction,		22,779 18
Total plant account,		\$136,811 22
<i>Amount carried forward,</i>		\$136,811 22

	Items.	Totals.
<i>Amount brought forward,</i>		\$136,811 22
Current assets:—		
Cash on hand,	\$12,377 02	
Accounts receivable,	4,654 27	
Supplies on hand,	2,397 16	
Total current assets,		19,428 45
Total debits,		\$156,239 67
<i>Liabilities.</i>		
Capital stock, common,		\$80,000 00
Current liabilities:—		
Loans and notes payable,	\$10,000 00	
Audited vouchers and accounts,	16,953 45	
Salaries and wages unpaid,	285 28	
Unearned subscribers' rentals,	20 57	
Total current liabilities,		27,259 30
Sinking and other special funds:—		
Reserve for doubtful accounts,	\$654 54	
Reserve for depreciation,	26,024 45	
Reserve for extraordinary repair,	831 69	
Total sinking and other special funds,		27,510 68
Total liabilities,		\$134,769 98
Balance, surplus,		21,469 69
Total credits,		\$156,239 67

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,		\$16,652 35
Gross earnings from operation,		62,675 08
Miscellaneous income,		259 39
Expenses, not including taxes,	\$50,397 95	
Rebates and discounts,	469 74	
Interest on floating debt,	1,053 16	
Taxes,	2,196 23	
Dividends declared on stock,	4,000 00	
Balance, surplus,	21,469 69	
	\$79,586 82	\$79,586 82

PLANT ACCOUNTS (ADDITIONS AND DEDUCTIONS DURING THE YEAR).

Additions.

Exchange construction:—		
Overhead lines,	\$6,954 07	
Underground lines,	1,535 39	
Central office equipment,	489 87	
Subscribers' station equipment,	5,612 44	
Total exchange construction and equipment,		\$14,591 77
Toll construction:—		
Overhead lines,		4,956 41
Total additions,		\$19,548 18
<i>Amount carried forward,</i>		\$19,548 18

	Items.	Totals.
<i>Amount brought forward,</i>		\$19,548 18
<i>Deductions.</i>		
Exchange overhead lines,	\$5,018 71	
Exchange underground lines,	1,063 00	
Toll overhead lines,	1,407 52	
Central office equipment,	27 20	
Subscribers' station equipment,	2,008 24	
Total deductions,		9,524 67
Net additions to plant account for the year,		\$10,023 51

STATISTICAL INFORMATION.

Number of subscribers,	1,851
Number of instruments,	2,087
Number of operators,	27
Number of pay stations,	33
Number of subscribers on party lines,	1,744
Number of subscribers on single lines,	107
Underground system: —	
Conduit, feet,	27,086.40
Duct, feet,	67,161.60
Cable, feet,	43,137.60
Wire, feet,	11,517,211.20
Overhead system: —	
Pole line, miles,	74.50
Iron wire, miles,	496.14
Copper wire, miles,	976.36

THE SOUTHERN MASSACHUSETTS TELEPHONE COMPANY.

Location of principal business office: 50 Oliver Street, Boston, Mass.

Date of organization: Feb. 17, 1880.

Date of incorporation: Feb. 17, 1880.

State in which incorporated: Massachusetts.

Date of annual meeting: second Saturday in February.

Date when company began to give service: February, 1880.

Cities and towns in Massachusetts in which service is given by the company over its own lines: —

Abington,	Chatham,	Fairhaven,
Acushnet,	Chilmark,	Fall River,
Avon,	Dartmouth,	Falmouth,
Barnstable,	Dennis,	Freetown,
Berkley,	Dighton,	Gay Head,
Bourne,	Duxbury,	Halifax,
Brewster,	East Bridgewater,	Hanover,
Bridgewater,	Eastham,	Hanson,
Brockton,	Easton,	Harwich,
Carver,	Edgartown,	Kingston,

Lakeville,	Orleans,	Swansea,
Mansfield,	Pembroke,	Taunton,
Marion,	Plymouth,	Tisbury,
Marshfield,	Plympton,	Truro,
Mashpee,	Provincetown,	Wareham,
Mattapoisett,	Raynham,	Wellfleet,
Middleborough,	Rehoboth,	West Bridgewater,
Nantucket,	Rochester,	Westport,
New Bedford,	Rockland,	West Tisbury,
Norton,	Sandwich,	Whitman,
Norwell,	Scituate,	Yarmouth.
Oak Bluffs,	Somerset,	

This company also gives service in the State of Rhode Island.

GENERAL OFFICERS AND OFFICIAL TITLES.

Thomas Sherwin,	<i>President.</i>
William R. Driver,	<i>Treasurer.</i>
Edmund S. Willard,	<i>Assistant Treasurer.</i>
Edmund W. Longley,	<i>Clerk, Auditor and Comptroller.</i>
Jasper N. Keller,	<i>Vice-President.</i>
Francis A. Houston,	<i>General Manager.</i>
William J. Denver,	<i>Assistant General Manager.</i>
Leslie D. Knowlton,	<i>Auditor of Disbursements.</i>
Ralph P. Jones,	<i>Auditor of Receipts.</i>
Webster A. Arey,	<i>Assistant Auditor.</i>

DIRECTORS AND RESIDENCES.

Charles F. Ayer,	Boston, Mass.
Charles W. Clifford,	New Bedford, Mass.
Theodore N. Vail,	Lyndonville, Vt.
Francis A. Houston,	Concord, Mass.
Jasper N. Keller,	Surry, N. H.
Moses G. Parker,	Lowell, Mass.
Thomas Sherwin,	Jamaica Plain, Mass.

CAPITAL.

Capital authorized by charter and increased under the general law,	\$600,000 00
Capital authorized by vote of company,	600,000 00
Capital paid in, 6,000 shares; par value, \$100,	600,000 00
Whole number of stockholders,	10
Number of stockholders resident in Massachusetts,	7
Amount of stock held in Massachusetts (shares),	51
Amount of stock held by parent telephone company (shares),	5,938

DEBTS.

Bonds or notes issued, viz.: —

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
June 1, 1896	June 1, 1916	Debenture, <i>Bonds.</i>	5	\$200,000 00
July 1, 1910	Demand,	- <i>Notes.</i> -	6	1,525,000 00
Total amount of bonds and notes,				\$1,725,000 00
Capital paid in,				600,000 00
Total liability for capital and loans,				\$2,325,000 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR (WHOLE SYSTEM)..

	Items.	Totals.
Gross telephone revenue, ¹		\$970,346 74
Less rebates and discounts,		521 35
Telephone revenue,		\$969,825 39
Operation,	\$376,882 01	
Current maintenance,	178,881 57	
Depreciation,	196,055 79	
Total expenses, not including taxes,		751,819 37
Net telephone earnings,		\$218,006 02
Miscellaneous income,		860 05
Total income above expenses, ²		\$218,866 07
Interest charges and taxes: —		
Interest on funded debt,	\$10,000 00	
Interest on floating debt,	116,236 48	
Taxes,	18,492 12	
Total charges,		144,728 60
Surplus of net income above charges,		\$74,137 47
Dividends declared: —		
6½ per cent. on \$600,000,		37,500 00
Surplus for year ending June 30, 1911,		\$36,637 47

¹ Telephone revenue and income in Massachusetts: —

Gross telephone revenue,	\$955,448 32
Less rebates and discounts,	521 35
Telephone revenue,	\$954,926 97
Miscellaneous income,	852 20
Total telephone revenue and income,	\$955,779 17

² In report of 1910, total income above expenses included a deduction for taxes, while in report of 1911 amount of taxes is deducted after this item.

EARNINGS (WHOLE SYSTEM).

Gross telephone revenue:—

	Items.	Totals.
Exchange service:—		
Subscribers' stations,	\$677,159 75	
Pay stations,	24,728 04	
Attachments and rentals,	3,825 02	
Total exchange service,	<u> </u>	\$705,712 81
Toll service:—		
Toll service,	\$258,831 46	
Attachments and rentals,	3,723 45	
Total toll service,	<u> </u>	262,554 91
Private line:—		
Rental instruments and equipment,		2,079 02
Total gross telephone revenue,		\$970,346 74
Less rebates and discounts,		521 35
Telephone revenue,		<u> </u>
		\$969,825 39
Miscellaneous income:—		
Interest on bank deposits,	\$520 13	
Sales and job work above field cost,	339 92	
Total miscellaneous income,	<u> </u>	860 05
Total telephone revenue and income,		<u> </u>
		\$970,685 44

EXPENSES (WHOLE SYSTEM).

Operation:—

General:—

Executive department,	\$10,376 00	
Accounting department,	7,548 07	
Financial department,	2,963 28	
Legal department,	6,208 14	
Total general,	<u> </u>	\$27,095 49

Commercial:—

Commercial supervision,	\$26,251 08	
Advertising,	6,555 24	
Canvassing,	20,533 24	
Directory,	12,564 34	
Revenue accounting,	23,956 64	
Revenue collecting,	27,028 66	
Pay-station commissions,	7,074 20	
Uncollectible accounts,	37 50	
Total commercial,	<u> </u>	124,000 90

Traffic:—

Traffic supervision,	\$20,647 23	
Service inspection,	6,507 46	
Operators' wages,	111,805 65	
Operating clerical wages,	5,170 43	
Rest and lunch rooms,	1,776 12	
Operators' schooling,	6,169 17	
Central office rent,	12,199 09	
Pay-station expense,	691 15	
Other operating expenses,	9,385 67	
Total traffic,	<u> </u>	174,351 97

Amount carried forward,		\$325,448 36
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	Items	Totals.
<i>Amount brought forward,</i>		\$325,448 36
<i>Operation — Concluded.</i>		
Rights, privileges and use of property: —		
Rental of instruments,	\$41,680 42	
Conduit, pole and other space,	7,538 96	
Total rights, privileges and use of property,		49,219 38
Insurance,		2,214 27
Total operation,		\$376,882 01
<i>Maintenance: —</i>		
<i>Repairs: —</i>		
Supervision,	\$29,664 09	
Aërial plant,	57,356 99	
Underground plant,	7,090 83	
Central office equipment,	16,647 64	
Subscribers' equipment,	34,869 22	
Real estate,	2,524 39	
Total repairs,	148,153 16	
Station removals and changes,	30,728 41	
Total current maintenance,		¹ 178,881 57
Depreciation of plant,		196,055 79
Total expenses, not including taxes,		² \$751,819 37

GENERAL BALANCE SHEET.

Assets.

<i>Exchange construction: —</i>		
Right of way,	\$60,871 04	
Overhead lines,	1,157,713 59	
Underground lines,	812,627 97	
Submarine lines,	4,925 10	
Central office equipment,	323,194 36	
Subscribers' station equipment,	507,704 43	
Total exchange construction and equipment,		\$2,867,036 49
<i>Toll construction: —</i>		
Right of way,	\$18,881 59	
Overhead lines,	539,715 01	
Underground lines,	165,062 16	
Submarine lines,	15,797 95	
Total toll construction,		739,456 71
Construction in process,		280,610 82
Real estate required for operation,		141,143 21
Office furniture and fixtures,		17,157 83
Tools and vehicles,		32,168 44
Total plant account,		\$4,077,573 50
Securities of other companies,		90 00
<i>Amount carried forward,</i>		\$4,077,663 50

¹ Total current maintenance includes station removals and changes, which account in 1910 was included in reconstruction.

² In report of 1910, total of all operating expenses included taxes.

	Items.	Totals.
<i>Amount brought forward,</i>		\$4,077,663 50
Current assets:—		
Cash on hand,	\$66,440 01	
Accounts receivable,	\$156,206 11	
Less uncollectible reserve,	24,734 46	
	<hr/>	131,471 65
Supplies on hand,	130,546 12	
Unexpired insurance,	2,737 72	
Total current assets,	<hr/>	331,195 50
Total debits,		\$4,408,859 00
<i>Liabilities.</i>		
Capital stock, common,		\$600,000 00
Bonded debt,		200,000 00
Current liabilities:—		
Loans and notes payable,	\$1,525,000 00	
Audited vouchers and accounts,	596,324 16	
Unearned subscribers' rentals,	4,588 61	
Total current liabilities,	<hr/>	2,125,912 77
Accrued liabilities:—		
Interest accrued but not due,	\$833 34	
Taxes accrued but not due,	7,694 07	
Reserve for directories,	1,601 53	
Vouchers and accounts accrued but not due,	5,814 40	
Total accrued liabilities,	<hr/>	15,943 34
Sinking and other special funds:—		
Maintenance,	\$333,064 88	
Fire insurance,	29,644 82	
Accident insurance,	9,004 11	
To meet plant supervisory expenses,	6,162 18	
To meet stable and garage expenses,	701 16	
To meet supply department expenses,	1,313 63	
	<hr/>	379,890 78
1908 inventory adjustment,		862,159 01
Total liabilities,		\$4,183,905 90
Balance, surplus,		224,953 10
Total credits,		\$4,408,859 00

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,		\$188,315 63
Gross earnings from operation,		970,346 74
Miscellaneous income,		860 05
Expenses, not including taxes,	\$751,819 37	
Rebates and discounts,	521 35	
Interest on funded debt,	10,000 00	
Interest on floating debt,	116,236 48	
Taxes,	18,492 12	
Dividends declared on stock:—		
1½ per cent., due Sept. 30, 1910,	9,000 00	
1½ per cent., due Dec. 31, 1910,	9,000 00	
1½ per cent., due March 31, 1911,	9,000 00	
1½ per cent., due June 30, 1911,	10,500 00	
Balance, surplus,	224,953 10	
	<hr/>	<hr/>
	\$1,159,522 42	\$1,159,522 42

PLANT ACCOUNTS (ADDITIONS AND DEDUCTIONS DURING THE YEAR).

Additions.

Exchange construction:—	Items.	Totals.
Right of way,	\$4,565 05	
Overhead lines,	119,740 41	
Underground lines,	30,211 80	
Submarine lines,	198 08	
Central office equipment,	7,464 44	
Subscribers' station equipment,	54,226 99	
Total exchange construction and equipment, —————		\$216,406 77
Toll construction:—		
Right of way,	\$265 37	
Overhead lines,	12,632 34	
Underground lines,	2,432 17	
Submarine lines,	274 65	
Total toll construction, —————		15,604 53
Construction in process,		208,818 46
Real estate required for operation,		423 31
Office furniture and fixtures,		10,021 11
Tools and vehicles,		4,141 38
Total additions,		\$455,415 56

Deductions.

Property sold:—		
Exchange construction:—		
Overhead lines,	\$112 83	
Underground lines,	302 65	
Central office equipment,	3 00	
Subscribers' station equipment,	64 61	
Total deductions, —————		483 09
Net additions to plant account for the year,		\$454,932 47

STATISTICAL INFORMATION.

	In Massachusetts.	Outside Massachusetts.	Whole System.
Number of subscribers,	28,222	289	28,511
Number of stations,	29,261	306	29,567
Number of operators,	270	—	270
Number of pay stations,	1,039	17	1,056
Number of subscribers on party lines,	24,805	281	25,086
Number of subscribers on single lines,	3,417	8	3,425
Underground system:—			
Conduit, feet,	328,052	—	328,052
Duct, feet,	1,441,455	—	1,441,455
Cable, feet,	582,000	—	582,000
Wire, miles,	27,492	—	27,492
Submarine system:—			
Cable, feet,	22,602	7,293	29,900
Wire, miles,	115	66	181
Overhead system:—			
Pole line, miles,	1,890	60	1,950
Copper wire, miles,	25,338	346	25,684
Iron wire, miles,	11,344	427	11,771

Liabilities.

Capital stock,	\$500 00
Other liabilities,	4 92
Surplus,	55 08
Total credits,	\$560 00

STATISTICAL INFORMATION.

Number of subscribers,	10
Number of instruments,	13
Number of subscribers on party lines,	10
Overhead system:—	
Pole line, miles,	6
Iron wire, miles,	6

BERNARDSTON AND GILL TELEPHONE COMPANY.

Location of principal business office: Bernardston, Mass.

Date when company began to give service: Feb. 1, 1903.

Service is given by this company over its own lines in the towns of Bernardston, Gill and Leyden.

GENERAL OFFICERS.

A. H. and C. R. Nelson, *Managers.*

CAPITAL.

Capital paid in,	\$4,000 00
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EARNINGS AND EXPENSES.

Gross earnings,	\$1,266 92
Expenses,	473 58
Net earnings,	\$793 34

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$4,000 00
Accounts receivable,	300 00
Supplies on hand,	500 00
Total debits,	\$4,800 00

Liabilities.

Capital stock,	\$4,000 00
Balance, surplus,	800 00
Total credits,	\$4,800 00

STATISTICAL INFORMATION.

Number of subscribers,	109
Number of instruments,	112
Number of operators,	3
Number of pay stations,	4

Number of subscribers on party lines,	108
Number of subscribers on single lines,	1
Overhead system:—	
Pole line, miles,	43
Iron wire, miles,	115

NOTE. — "Tolls went to operators for their fees, let it be whatever it is, probably amounting to about \$25 per month to them. A record is kept by the New England Telephone and Telegraph Company of the tolls, and must be returned by them."

THE BOLTON TELEPHONE COMPANY.

Location of principal business office: Bolton, Mass.

Date of organization: January, 1906.

Date of incorporation: January, 1906.

State in which incorporated: Massachusetts.

Date of annual meeting: January 15.

Date when company began to give service: January, 1906.

Service is given by this company over its own lines in the town of Bolton.

GENERAL OFFICERS AND OFFICIAL TITLES.

Edward D. Emerson,	<i>President.</i>
Franklin J. Hamblin,	<i>Treasurer.</i>

DIRECTORS AND RESIDENCES.

Edward D. Emerson,	Bolton, Mass.
William E. Litchfield,	Newton, Mass.
Franklin J. Hamblin,	Bolton, Mass.

CAPITAL.

Capital paid in,	\$1,500 00
Number of stockholders,	20
Number of stockholders resident in Massachusetts,	20

EARNINGS AND EXPENSES.

Gross earnings:—	
Exchange service,	\$1,302 08
Toll service,	246 91
Miscellaneous earnings,	21 86
Total gross earnings,	\$1,570 85
Expenses,	1,081 05
Net earnings,	\$489 80
Dividends,	60 00
Surplus for year,	\$429 80
Surplus balance from last year,	1,151 88
	\$1,581 68
Miscellaneous charges to surplus,	21 86
Surplus June 30, 1911,	\$1,559 82

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$2,138 37
Notes and accounts receivable,	99 24
Cash on hand,	260 02
Reserve fund,	676 34
Total debits,	\$3,173 97

Liabilities.

Capital stock,	\$1,500 00
Accounts payable,	114 15
Balance, surplus,	1,559 82
Total credits,	\$3,173 97

STATISTICAL INFORMATION.

Number of subscribers,	67
Number of instruments,	69
Number of operators,	1
Number of pay stations,	1
Number of subscribers on party lines,	67
Overhead system: —	
Pole line, miles,	22
Iron wire, miles,	54

CHELMSFORD TELEPHONE COMPANY.

Location of principal business office: Chelmsford, Mass.

Date of organization: Dec. 23, 1903.

Date of annual meeting: first Monday in January.

Date when company began to give service: Jan. 4, 1904.

Service is given by this company over its own lines in the town of Chelmsford.

GENERAL OFFICERS AND OFFICIAL TITLES.

Joseph E. Warren,	<i>President.</i>
Eben T. Adams,	<i>Treasurer and Clerk.</i>

EARNINGS AND EXPENSES.

Gross earnings,	\$180 00
Expenses,	158 82
Net earnings,	\$21 18

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$500 00
Supplies on hand,	8 00
Cash on hand,	13 00
Total debts,	\$521 00

Liabilities.

Capital stock,	\$500 00
Balance, surplus,	21 00
Total credits,	<hr/> \$521 00

STATISTICAL INFORMATION.

Number of subscribers,	20
Number of instruments,	24
Number of operators,	1
Number of subscribers on party lines,	20
Overhead system: —	
Pole line, miles,	7
Iron wire, miles,	14

COLUMBIA AND RENSSELAER TELEPHONE AND TELEGRAPH
COMPANY.

Location of principal business office: West Lebanon, N. Y.

Date of organization: March, 1894.

Date of incorporation: March, 1894.

State in which incorporated: New York.

Date of annual meeting: July 5.

Date when company began to give service: March, 1894.

Service is given by this company over its own lines in the town of Hancock, Mass.,
and in the State of New York.

GENERAL OFFICERS AND OFFICIAL TITLES.

Abner S. Haight,	<i>President.</i>
Warren Fowler,	<i>Vice-President and General Manager.</i>
Mary J. Fowler,	<i>Secretary and Treasurer.</i>

DIRECTORS AND RESIDENCES.

Abner S. Haight,	61 Worth Street, New York, N. Y.
Warren Fowler,	West Lebanon, New York.
Harriet E. Haight,	New Lebanon Centre, New York.
Mary J. Fowler,	West Lebanon, New York.
Austin D. Haight,	New Lebanon Centre, New York.
May F. Fowler,	West Lebanon, New York.
Warrena V. Fowler,	West Lebanon, New York.

CAPITAL.

Capital paid in,	\$30,000 00
Number of stockholders,	7
Number of stockholders resident in Massachusetts,	None.

EARNINGS AND EXPENSES.

Gross earnings, ¹	\$12,215 91
Expenses,	10,622 48
Net earnings,	\$1,593 43
Interest payments and taxes,	244 27
Net profit,	\$1,349 16
Dividends,	900 00
Surplus for year,	\$449 16

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$31,699 07
Notes and accounts receivable,	1,762 19
Cash on hand,	355 85
Total debits,	\$33,817 11

Liabilities.

Capital stock,	\$30,000 00
Accounts payable,	1,074 48
Balance, surplus,	2,742 63
Total credits,	\$33,817 11

STATISTICAL INFORMATION.

Number of subscribers,	775
Number of instruments,	796
Number of operators,	11
Number of pay stations,	10
Number of subscribers on party lines,	765
Number of subscribers on single lines,	10
Overhead system:—	
Pole line, miles,	150
Iron wire, miles,	750

NOTE.—“We have no poles in Massachusetts. Have one circuit on poles of other lines, about one mile in length, with one subscriber at \$60 per annum. Also have fourteen subscribers on instruments connected to lines owned by farmers which includes everything we have in Massachusetts. These 14 instruments pay \$7.50 per annum. The toll business done in the State will not exceed \$50 per year.”

CRESCENT TELEPHONE COMPANY.

Location of principal business office: New Salem, Mass.

Date of organization: 1902.

Date when company began to give service: October, 1902.

Service is given by this company over its own lines in the towns of New Salem and Orange.

¹ Gross earnings in Massachusetts about \$215.

GENERAL OFFICER.

E. F. Stowell, *Owner.*

CAPITAL.

Capital paid in, \$500 00

EARNINGS AND EXPENSES.

Gross earnings, \$146 00

Expenses, 18 00

Net earnings, \$128 00

GENERAL BALANCE SHEET.

Assets.

Property accounts, \$500 00

Supplies on hand, 10 00

Total debits, \$510 00

Liabilities.

Capital stock, \$500 00

Balance, surplus, 10 00

Total credits, \$510 00

STATISTICAL INFORMATION.

Number of subscribers, 21

Number of instruments, 22

Number of subscribers on party lines, 21

Overhead system: —

Pole line, miles, 13

Iron wire, miles, 26

THE FARMERS' MUTUAL TELEPHONE COMPANY OF BRISTOL COUNTY.

Location of principal business office: Norton, Mass.

Date of incorporation: Sept. 2, 1902.

State in which incorporated: Massachusetts.

Date of annual meeting: second Tuesday in May.

Date when company began to give service: previous to January, 1903.

Service is given by this company over its own lines in Norton, Mass.

GENERAL OFFICERS AND OFFICIAL TITLES.

Arthur M. Round, *President.*

Charles A. Ratcliffe, *Clerk and Treasurer.*

Frank A. Clapp, *Superintendent.*

DIRECTORS AND RESIDENCES.

Arthur M. Round,	.	.	.	.	.	.	Norton, Mass.
Samuel V. Cole,	.	.	.	.	.	.	Norton, Mass.
Homer L. Lane,	.	.	.	.	.	.	Norton, Mass.
Frank A. Clapp,	.	.	.	.	.	.	Norton, Mass.

CAPITAL.

Capital paid in,	.	.	.	.	.	.	.	\$1,050 00
Number of stockholders,	.	.	.	.	.	.	.	13
Number of stockholders resident in Massachusetts,	.	.	.	.	.	.	.	13
Amount of notes outstanding,	.	.	.	.	.	.	.	\$125 00

EARNINGS AND EXPENSES.

Gross earnings,	.	.	.	.	.	.	.	\$123 00
Expenses,	.	.	.	.	.	.	.	240 00
Deficit for year,	.	.	.	.	.	.	.	\$117 00
Deficit, June 30, 1911,	.	.	.	.	.	.	.	89 71

GENERAL BALANCE SHEET.

Assets.

Property accounts,	.	.	.	.	.	.	.	\$1,200 00
Cash on hand,	.	.	.	.	.	.	.	33 29
Balance, deficit,	.	.	.	.	.	.	.	89 71
Total debits,	.	.	.	.	.	.	.	\$1,323 00

Liabilities.

Capital stock,	.	.	.	.	.	.	.	\$1,050 00
Notes payable,	.	.	.	.	.	.	.	125 00
Accounts payable,	.	.	.	.	.	.	.	148 00
Total credits,	.	.	.	.	.	.	.	\$1,323 00

STATISTICAL INFORMATION.

Number of subscribers,	.	.	.	.	.	.	.	15
Number of instruments,	.	.	.	.	.	.	.	21
Number of subscribers on party lines,	.	.	.	.	.	.	.	13
Number of subscribers on single lines,	.	.	.	.	.	.	.	2
Overhead system:—								
Pole line, miles,	.	.	.	.	.	.	.	6
Iron wire, miles,	.	.	.	.	.	.	.	6

GRANBY TELEPHONE AND TELEGRAPH COMPANY.

Location of principal business office: Granby, Mass.

Date of organization: February, 1903.

Date of incorporation: February, 1903.

State in which incorporated: Massachusetts.

Date of annual meeting: third Monday in January.

Date when company began to give service: May, 1903.

Service is given by this company over its own lines in the towns of Granby and Ludlow.

GENERAL OFFICERS AND OFFICIAL TITLES.

George R. Smith,	<i>President.</i>
Winfred F. Forward,	<i>Manager.</i>
Willard A. Taylor,	<i>Secretary and Treasurer.</i>
Clifford W. Ferry,	<i>Auditor.</i>

DIRECTORS AND RESIDENCES.

George R. Smith,	Granby, Mass.
H. H. Moody,	Granby, Mass.
D. C. Nutting,	Granby, Mass.
W. F. Forward,	Granby, Mass.
D. R. Barnes,	Granby, Mass.
G. F. Eastman,	Granby, Mass.
H. S. Taylor,	Granby, Mass.

CAPITAL.

Capital paid in,	\$1,200 00
Number of stockholders,	35
Number of stockholders resident in Massachusetts,	34
Amount of stock held in Massachusetts,	\$1,100 00

EARNINGS AND EXPENSES.

Gross earnings:—	
Exchange service,	\$801 79
Toll service,	149 53
Total gross earnings,	\$951 32
Expenses,	624 62
Net earnings,	\$326 70
Dividends,	96 00
Surplus for year,	\$230 70
Surplus balance from last year,	176 97
Surplus June 30, 1911,	\$407 67

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$1,200 00
Cash on hand and due from subscribers,	407 67
Total debits,	\$1,607 67

Liabilities.

Capital stock,	\$1,200 00
Accounts payable,	29 25
Balance, surplus,	378 42
Total credits,	\$1,607 67

STATISTICAL INFORMATION.

Number of subscribers,	61
Number of instruments,	61
Number of operators,	4
Number of pay stations,	1
Number of subscribers on party lines,	61
Overhead system: —	
Pole line, miles,	15
Iron wire, miles,	30

HEATH LOCAL TELEPHONE COMPANY.

Location of principal business office: North Heath, Mass.

Date of organization: Nov. 1, 1906.

Date when company began to give service: Nov. 1, 1906.

Service is given by this company over its own lines in the town of Heath.

GENERAL OFFICERS AND OFFICIAL TITLES.

Isaac W. Stetson,	<i>President and General Manager.</i>
Clifford J. Hager,	<i>Clerk and Treasurer.</i>

DIRECTORS AND RESIDENCES.

Isaac W. Stetson,	North Heath, Mass.
Clifford J. Hager,	Dell, Mass.
Levi Livley,	Dell, Mass.
Fred Stone,	Cyrus, Mass.

CAPITAL.

Capital paid in,	\$810 00
Number of stockholders,	10
Number of stockholders resident in Massachusetts,	10

EARNINGS AND EXPENSES.

Gross earnings: —	
Exchange service,	\$648 00
Toll service,	15 00
Total gross earnings,	\$663 00
Expenses,	713 01
Net deficit,	\$49 99
Dividends,	48 60
Deficit for the year,	\$98 59

GENERAL BALANCE SHEET.

<i>Assets.</i>		
Property accounts,	.	\$1,100 00
Supplies on hand,	.	15 00
Cash on hand,	.	46 30
Total debits,		\$1,161 30
<i>Liabilities.</i>		
Capital stock,	.	\$810 00
Accounts payable,	.	190 51
Balance, surplus,	.	160 79
Total credits,		\$1,161 30

STATISTICAL INFORMATION.

Number of subscribers,	.	81
Number of instruments,	.	82
Number of operators,	.	2
Number of pay stations,	.	4
Number of subscribers on party lines,	.	81
Overhead system:—		
Pole line, miles,	.	22
Iron wire, miles,	.	64

NOTE. — "Free service was to be given to all of our subscribers to the Heath Telephone Company for like service to us in the town of Charlemont, Mass."

THE HIGHLAND TELEPHONE COMPANY.

Location of principal business office: Cooleyville, Mass.

Date of organization: May 22, 1907.

Date of incorporation: Aug. 9, 1907.

State in which incorporated: Massachusetts.

Date of annual meeting: first Monday in May.

Date when company began to give service: Sept. 1, 1901.

Service is given by this company over its own lines in the towns of Leverett, New Salem, Prescott and Shutesbury.

GENERAL OFFICERS AND OFFICIAL TITLES.

Willard Putnam,	.	<i>President.</i>
Rawson King,	.	<i>Secretary and Treasurer.</i>

DIRECTORS AND RESIDENCES.

Willard Putnam,	.	Cooleyville, Mass.
Rawson King,	.	Cooleyville, Mass.
Harriet B. Putnam,	.	Cooleyville, Mass.

CAPITAL.

Capital paid in,	\$5,000 00
Number of stockholders,	4
Number of stockholders resident in Massachusetts,	4
Amount of notes outstanding,	\$800 00

EARNINGS AND EXPENSES.

Gross earnings:—

Exchange service,	\$1,352 31
Toll service,	650 00
Total gross earnings,	\$2,002 31
Expenses,	1,425 33
Net earnings,	\$576 98
Interest payments,	48 00
Net profit,	\$528 98
Dividends,	120 00
Surplus for year,	\$408 98
Surplus balance from last year,	754 39
Surplus June 30, 1911,	\$1,153 37

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$5,800 00
Notes and accounts receivable,	500 00
Supplies on hand,	100 00
Cash on hand,	489 85
Other assets,	63 52
Total debits,	\$6,953 37

Liabilities.

Capital stock,	\$5,000 00
Notes payable,	800 00
Balance, surplus,	1,153 37
Total credits,	\$6,953 37

STATISTICAL INFORMATION.

Number of subscribers,	146
Number of instruments,	165
Number of operators,	3
Number of pay stations,	12
Number of subscribers on party lines,	146
Overhead system:—	
Pole line, miles,	54
Iron wire, miles,	216

LITTLETON TELEPHONE ASSOCIATION.

Location of principal business office: Littleton, Mass.

Date of organization: April 18, 1904.

Date of annual meeting: first Monday in April.

Date when company began to give service: October, 1904.

Service is given by this company over its own lines in the towns of Acton, Harvard, Littleton and Westford.

GENERAL OFFICERS AND OFFICIAL TITLES.

Frank B. Priest,	.	.	.	.	.	.	<i>President.</i>
John M. Hartwell,	.	.	.	.	.	.	<i>Secretary and Treasurer.</i>
Josiah P. Thacher,	.	.	.	.	.	.	<i>Manager.</i>

CAPITAL.

Capital paid in,	.	.	.	.	.	.	.	\$1,500 00
Number of stockholders,	.	.	.	.	.	.	.	60
Number of stockholders resident in Massachusetts,	.	.	.	.	.	.	.	60

EARNINGS AND EXPENSES.

Gross earnings: —								
Exchange service,	.	.	.	.	.	.	.	\$600 00
Toll service,	.	.	.	.	.	.	.	75 00
Total gross earnings,	.	.	.	.	.	.	.	\$675 00
Expenses,	.	.	.	.	.	.	.	465 28
Net earnings,	.	.	.	.	.	.	.	\$209 72

GENERAL BALANCE SHEET.

Assets.

Property accounts,	.	.	.	.	.	.	.	\$1,500 00
Notes and accounts receivable,	.	.	.	.	.	.	.	278 30
Cash on hand,	.	.	.	.	.	.	.	42 44
Total debits,	.	.	.	.	.	.	.	\$1,820 74

Liabilities.

Capital stock,	.	.	.	.	.	.	.	\$1,500 00
Accounts payable,	.	.	.	.	.	.	.	39 89
Balance, surplus,	.	.	.	.	.	.	.	280 85
Total credits,	.	.	.	.	.	.	.	\$1,820 74

STATISTICAL INFORMATION.

Number of subscribers,	.	.	.	.	.	.	.	65
Number of instruments,	.	.	.	.	.	.	.	62
Number of subscribers on party lines,	.	.	.	.	.	.	.	62
Number of subscribers on single lines,	.	.	.	.	.	.	.	3
Overhead system: —								
Pole line, miles,	.	.	.	.	.	.	.	23
Iron wire, miles,	.	.	.	.	.	.	.	46

THE NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY OF
MASSACHUSETTS.

Location of principal business office: 50 Oliver Street, Boston, Mass.

Date of organization: May 17, 1888.

Date of incorporation: May 17, 1888.

State in which incorporated: Massachusetts.

Date of annual meeting: first Wednesday in April.

GENERAL OFFICERS AND OFFICIAL TITLES.

Jasper N. Keller,	. . . . .	<i>President.</i>
Francis A. Houston,	. . . . .	<i>General Manager.</i>
Edmund S. Willard,	. . . . .	<i>Treasurer.</i>
Edward A. Wilkie,	. . . . .	<i>Clerk.</i>
William J. Denver,	. . . . .	<i>Assistant General Manager.</i>
Carl T. Keller,	. . . . .	<i>Assistant General Manager.</i>
Edmund W. Longley,	. . . . .	<i>Auditor.</i>

DIRECTORS AND RESIDENCES.

Jasper N. Keller,	. . . . .	Surry, N. H.
William J. Denver,	. . . . .	Roxbury, Mass.
Francis A. Houston,	. . . . .	Concord, Mass.
Edmund W. Longley,	. . . . .	Salem, Mass.

CAPITAL.

Capital authorized by certificate of association,	. . . . .	\$25,000 00
Capital authorized by vote of company,	. . . . .	25,000 00
Capital paid in, 250 shares: par value, \$100,	. . . . .	25,000 00
Whole number of stockholders,	. . . . .	5
Number of stockholders resident in Massachusetts,	. . . . .	3
Amount of stock held in Massachusetts (shares),	. . . . .	15
Amount of stock held by parent telephone company (shares),	. . . . .	230

DEBTS.

Bonds or notes issued, viz.:—

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
Dec. 31, 1908	Demand,	Note,	6	\$398,000 00
Total amount of bonds and notes,				\$398,000 00
Capital paid in,				25,000 00
Total liability for capital and loans,				\$423,000 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Gross telephone revenue, . . . . .	.	—
Executive department expense, . . . . .	.	\$2,009 92
Real estate revenue, . . . . .	.	36,396 04
		<hr/>
Total income above expenses, . . . . .	.	\$34,386 12
Interest charges and taxes: —		
Interest on floating debt,	\$24,041 36	
Taxes,	10,141 26	
Total charges,	<hr/>	34,182 62
		<hr/>
Surplus for year ending June 30, 1911, . . . . .	.	\$203 50

GENERAL BALANCE SHEET.

Assets.

Exchange and toll construction,	\$33,000 00
Real estate not required for operation.	473,197 90
	<hr/>
Total plant account,	\$506,197 90
Current assets: —	
Cash on hand,	538 83
	<hr/>
Total debits,	\$506,736 73

Liabilities.

Capital stock, common,	\$25,000 00
Current liabilities: —	
Loans and notes payable,	431,000 00
Accrued liabilities: —	
Taxes accrued but not due,	3,229 00
	<hr/>
Total liabilities,	\$459,229 00
Balance, surplus,	47,507 73
	<hr/>
Total credits,	\$506,736 73

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year, . . . . .	.	\$47,304 23
Real estate revenue, . . . . .	.	36,396 04
Expenses,	\$2,009 92	
Interest on floating debt,	24,041 36	
Taxes,	10,141 26	
Balance, surplus,	47,507 73	
		<hr/>
	\$83,700 27	\$83,700 27

PROPERTY ACCOUNTS (ADDITIONS AND DEDUCTIONS DURING THE YEAR).

Additions.

Real estate not required for operation, ¹	\$1,366 82
------------------------------------------------------	------------

Deductions.

Property sold:—

Real estate,	20,294 41
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Net deductions to plant accounts for the year,	\$21,661 23
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NOTE. — This is not an operating company.

NORTHFIELD FARMS TELEPHONE COMPANY.

Location of principal business office: Northfield Farms, Mass.

Date when company began to give service: 1902.

Service is given by this company over its own lines in the town of Northfield.

GENERAL OFFICER.

Osgood L. Leach, *Owner and Manager.*

CAPITAL.

Capital paid in,	\$500 00
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Number of stockholders,	2
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Number of stockholders resident in Massachusetts,	2
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EARNINGS AND EXPENSES.

Gross earnings,	\$340 82
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Expenses,	195 85
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Net earnings,	\$144 97
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GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$500 00
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Liabilities.

Capital stock,	\$500 00
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STATISTICAL INFORMATION.

Number of subscribers,	30
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Number of instruments,	31
----------------------------------	----

Number of pay stations,	1
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Number of subscribers on party lines,	30
-------------------------------------------------	----

Overhead system:—

Pole line, miles,	9
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Iron wire, miles,	9
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NOTE. — "Private line owned by O. L. Leach and Mrs. C. H. Green."

¹ Credit item.

NORTH ORANGE TELEPHONE COMPANY.

Location of principal business office: North Orange, Mass.

Date of organization: April 29, 1902.

Date when company began to give service: about June 1, 1902.

Service is given by this company over its own lines in the town of Orange, Mass.

GENERAL OFFICER.

H. W. Gilmore, *General Manager.*

EARNINGS AND EXPENSES.

Gross earnings,	\$59 15
Expenses,	26 53
Net earnings,	\$32 62
Surplus balance from last year,	99 59
Surplus June 30, 1911,	\$132 21

STATISTICAL INFORMATION.

Number of subscribers,	48
Number of instruments,	48
Number of operators,	1
Number of subscribers on party lines,	48
Overhead system:—	
Pole line, miles,	10
Iron wire, miles,	10

NOTE.—“This company was organized for the convenience of the farmers here. They own the lines, but all instruments are hired from the New England Telephone and Telegraph Company. There are five separate lines connected at North Orange post office by a switchboard also connected with the New England Telephone and Telegraph Company at Athol.

“Each line has its own president and treasurer, but the general management of the instruments and expenses are left to the manager. The repairs of the lines are done by the farmers themselves. The income derived for the company is from the New England Telephone and Telegraph Company who allow 5 cents each on all messages which pass over the different lines. This is divided with each separate line in proportion to the number of subscribers.”

OAKHAM AND COLDBROOK SPRINGS TELEPHONE COMPANY.

Location of principal business office: Oakham, Mass.

Date of organization: June 1, 1893.

Date when company began to give service: July 16, 1903.

Service is given by this company over its own lines in the towns of Barre and Oakham.

GENERAL OFFICERS.

Frank S. Conant, *President and General Manager.*
 Harry B. Parker, *Treasurer.*

CAPITAL.

Capital paid in,	\$2,041 18
Number of stockholders,	2
Number of stockholders resident in Massachusetts,	2
Amount of notes outstanding,	\$400 00

EARNINGS AND EXPENSES.

Gross earnings: —

Exchange service,	\$944 56
Toll service,	310 32
Miscellaneous earnings,	53 80
Total gross earnings,	\$1,308 68
Expenses,	992 75
Net earnings,	\$315 93
Interest payments,	31 15
Net profit,	\$284 78
Surplus balance from last year,	175 71
	\$460 49
Miscellaneous charges to surplus,	60 53
Surplus June 30, 1911,	\$399 96

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$2,910 40
Notes and accounts receivable,	59 16
Supplies on hand,	20 00
Cash on hand,	6 61
Other assets,	45 00
Total debits,	\$3,041 17

Liabilities.

Capital stock,	\$2,041 18
Notes payable,	400 00
Accounts payable,	188 03
Other liabilities,	12 00
Balance, surplus,	399 96
Total credits,	\$3,041 17

STATISTICAL INFORMATION.

Number of subscribers,	64
Number of instruments,	70
Number of operators,	3
Number of pay stations,	4

Number of subscribers on party lines,	61
Number of subscribers on single lines,	3
Overhead system: —	
Pole line, miles,	26.5
Iron wire, miles,	77
Copper wire, miles,	2

E. M. PARTRIDGE.

Location of principal business office: Millers Falls, Mass.

Date when company began to give service: June 1, 1899.

Service is given by this concern over its own lines in the towns of Erving and Montague.

GENERAL OFFICER.

E. M. Partridge, *Owner.*

EARNINGS AND EXPENSES.

Gross earnings: —	
Exchange service,	\$951 63
Toll service,	3 95
Miscellaneous earnings,	285 50
Total gross earnings,	\$1,241 08
Expenses,	1,164 97
Net earnings,	\$76 11

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$1,195 48
Notes and accounts receivable,	176 34
Supplies on hand,	35 00
Cash on hand,	23 55
Total debits,	\$1,430 37

Liabilities.

Capital stock,	\$1,195 68
Balance, surplus,	234 69
Total credits,	\$1,430 37

STATISTICAL INFORMATION.

Number of subscribers,	69
Number of instruments,	73
Number of pay stations,	3
Number of subscribers on party lines,	66
Number of subscribers on single lines,	3
Overhead system: —	
Pole line, miles,	$\frac{3}{4}$
Iron wire, miles,	16
Copper wire, miles,	1

RICHMOND TELEPHONE COMPANY.

Location of principal business office: Richmond, Mass.

Date of organization: Aug. 25, 1903.

Date of incorporation: 1903.

State in which incorporated: Massachusetts.

Date of annual meeting: first Friday after July 1.

Date when company began to give service: 1903.

Service is given by this company over its own lines in the town of Richmond, Mass.

GENERAL OFFICERS AND OFFICIAL TITLES.

Sidney M. Loveland,	<i>President and General Manager.</i>
Charles H. Nichols,	<i>Vice-President.</i>
Jesse H. Fairfield, Jr.,	<i>Clerk and Treasurer.</i>

DIRECTORS AND RESIDENCES.

Sidney M. Loveland,	Richmond, Mass.
Charles H. Nichols,	Richmond, Mass.
William H. Sherrill,	Richmond, Mass.
Amos G. Kiltz,	Richmond, Mass.
James H. Barnes,	Richmond, Mass.

CAPITAL.

Capital paid in,	\$1,610 00
Number of stockholders,	22
Number of stockholders resident in Massachusetts,	19
Amount of stock held in Massachusetts (shares),	19
Amount of notes outstanding,	\$700 00

EARNINGS AND EXPENSES.

Gross earnings: —

Exchange service,	\$1,133 19
Toll service,	590 87
Miscellaneous earnings,	1 00
Total gross earnings,	\$1,725 06
Expenses,	1,512 64
Net earnings,	\$212 42
Interest payments,	43 75
Net profit,	\$168 67
Surplus balance from last year,	1,693 33
Miscellaneous charges to surplus,	463 45
Surplus June 30, 1911,	\$1,398 55

GENERAL BALANCE SHEET.

<i>Assets.</i>	
Property accounts,	\$3,531 37
Notes and accounts receivable,	496 50
Cash on hand,	41 50
Total debits,	\$4,069 37
<i>Liabilities.</i>	
Capital stock,	\$1,610 00
Notes payable,	700 00
Accounts payable,	360 82
Balance, surplus,	1,398 55
Total credits,	\$4,069 37

STATISTICAL INFORMATION.

Number of subscribers,	73
Number of instruments,	86
Number of operators,	2
Number of pay stations,	2
Number of subscribers on party lines,	69
Number of subscribers on single lines,	4
Overhead system: —	
Pole line, miles,	27.5
Iron wire, miles,	47

ROWLEY TELEPHONE COMPANY.

Location of principal business office: Rowley, Mass.

Date when company began to give service: Dec. 15, 1898.

Service is given by this company over its own lines in the towns of Ipswich and Rowley.

GENERAL OFFICERS.

Almon E. Carpenter and Albert E. Bailey, *Owners.*

CAPITAL.

Capital paid in,	\$1,545 67
Amount of notes outstanding,	1,600 00

EARNINGS AND EXPENSES.

Gross earnings: —	
Exchange service,	\$605 50
Toll service,	159 18
Miscellaneous earnings,	5 75
Total gross earnings,	\$770 43
Expenses,	444 69
Net earnings,	\$325 74
Interest payments,	82 00
Net profit,	\$243 74

GENERAL BALANCE SHEET.

<i>Assets.</i>	
Property accounts,	\$2,358 93
Notes and accounts receivable,	623 73
Supplies on hand,	400 00
Cash on hand,	288 64
Total debits,	\$3,671 30
<i>Liabilities.</i>	
Capital stock,	\$1,545 67
Notes payable,	1,600 00
Balance, surplus,	525 63
Total credits,	\$3,671 30

STATISTICAL INFORMATION.

Number of subscribers,	47
Number of instruments,	47
Number of operators,	1
Number of pay stations,	4
Number of subscribers on party lines,	44
Number of subscribers on single lines,	3
Overhead system: —	
Pole line, miles,	10
Iron wire, miles,	27

STATE LINE CO-OPERATIVE TELEPHONE COMPANY NO. 7.

Location of principal business office: West Stockbridge, Mass.

Date of organization: Jan. 1, 1902.

Date when company began to give service: Jan. 1, 1902.

Service is given by this company over its own lines in the town of West Stockbridge, and in the State of New York.

GENERAL OFFICERS AND OFFICIAL TITLES.

John Howes,	<i>President.</i>
John P. Smith,	<i>Treasurer.</i>
Charles H. Baldwin,	<i>Secretary.</i>

CAPITAL.

Capital paid in,	\$525 00
Number of stockholders,	15

EARNINGS AND EXPENSES.

Gross earnings,	\$88 17
Expenses,	84 40
Surplus June 30, 1911,	\$3 77

GENERAL BALANCE SHEET.

<i>Assets.</i>									
Property accounts,									\$525 00
Cash on hand,									3 77
									<hr/>
Total debits,									\$528 77
<i>Liabilities.</i>									
Capital stock,									\$525 00
Balance, surplus,									3 77
									<hr/>
Total credits,									\$528 77

STATISTICAL INFORMATION.

Number of subscribers,	15
Number of instruments,	15
Number of operators,	2
Number of pay stations,	2
Number of subscribers on party lines,	15
Overhead system: —	
Pole line, miles,	5
Iron wire, miles,	10

STATE LINE TELEPHONE COMPANY.

Location of principal business office: West Stockbridge, Mass.

Date when company began to give service: April, 1902.

Service is given by this company over its own lines in the town of West Stockbridge.

GENERAL OFFICER.

W. H. Losty, *Owner.*

CAPITAL.

Capital paid in, \$1,410 00

EARNINGS AND EXPENSES.

Gross earnings: —	
Exchange service,	\$60 05
Toll service,	17 70
Miscellaneous earnings,	207 00
<hr/>	
Total gross earnings,	\$284 75
Expenses,	284 75
Surplus balance from last year,	\$87 64
Surplus June 30, 1911,	87 64

GENERAL BALANCE SHEET.

<i>Assets.</i>	
Property accounts,	\$1,410 00
Cash on hand,	87 64
<hr/>	
Total debits,	\$1,497 64
<i>Liabilities.</i>	
Capital stock,	\$1,410 00
Balance, surplus,	87 64
<hr/>	
Total credits,	\$1,497 64

STATISTICAL INFORMATION.

Number of subscribers,	17
Number of instruments,	17
Number of pay stations,	2
Number of subscribers on party lines,	17
Overhead system:—	
Pole line, miles,	9
Iron wire, miles,	9

NOTE. — "The so-called State Line Telephone Company is not an incorporated body, but is a name given by the New England Telephone Company in their directory to the exchange at West Stockbridge and State Line owned by W. H. Losty and that he has made this report as near right as possible."

TAGHCONIC TELEPHONE COMPANY.

Location of principal business office: West Stockbridge, Mass.

Date of organization: Dec. 27, 1907.

Date of incorporation: July 1, 1908.

State in which incorporated: Massachusetts.

Date of annual meeting: first Tuesday in December.

Date when company began to give service: Jan. 1, 1909.

Service is given by this company over its own lines in the towns of Great Barrington and West Stockbridge, Mass.

GENERAL OFFICERS AND OFFICIAL TITLES.

George H. Cobb,	<i>President.</i>
Thomas L. Curran,	<i>Secretary.</i>
Charles B. Wilson,	<i>Treasurer.</i>

DIRECTORS AND RESIDENCES.

Fabian B. Petit,	West Stockbridge, Mass.
Charles B. Wilson,	West Stockbridge, Mass.
George H. Cobb,	Housatonic, Mass.

CAPITAL.

Capital paid in,	\$1,000 00
Number of stockholders,	21
Number of stockholders resident in Massachusetts,	21

EARNINGS AND EXPENSES.

Expenses,	\$46 25
Net earnings,	285 75
Net profit,	176 25
Dividends,	60 00
Surplus for year,	164 25
Surplus balance from last year,	63 07
Miscellaneous charges to surplus,	3 25
Surplus June 30, 1911,	164 25

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$1,000 00
Cash on hand,	164 25
Total debits,	\$1,164 25

Liabilities.

Capital stock,	\$1,000 00
Balance, surplus,	164 25
Total credits,	\$1,164 25

STATISTICAL INFORMATION.

Number of subscribers,	31
Number of instruments,	31
Number of operators,	2
Number of subscribers on party lines,	31
Overhead system:—	
Pole line, miles,	18
Iron wire, miles,	24

WEST STOCKBRIDGE MUTUAL TELEPHONE COMPANY.

Location of principal business office: West Stockbridge, Mass.

Date of organization: Feb. 20, 1904.

Date of incorporation: March 7, 1904.

State in which incorporated: Massachusetts.

Date of annual meeting: second Monday in May.

Date when company began to give service: May 1, 1904.

Service is given by this company over its own lines in the town of West Stockbridge.

GENERAL OFFICERS AND OFFICIAL TITLES.

Cyrus W. Sprague,	<i>President.</i>
William W. Bartlett,	<i>Secretary and Treasurer.</i>

DIRECTORS AND RESIDENCES.

Cyrus W. Sprague,	West Stockbridge, Mass.
Vallas R. Truesdell,	West Stockbridge, Mass.
Charles R. Van Buskirk,	West Stockbridge, Mass.
Charles H. Fuarey,	West Stockbridge, Mass.
James S. Moore,	West Stockbridge, Mass.

CAPITAL.

Capital paid in,	\$1,000 00
Number of stockholders,	12
Number of stockholders resident in Massachusetts,	11
Amount of stock held in Massachusetts,	\$950 00

EARNINGS AND EXPENSES.

Gross earnings:—	
Exchange service,	\$357 10
Expenses,	256 15
Net earnings,	\$100 95
Dividends,	136 00
Deficit for the year,	\$35 05
Surplus balance from last year,	141 07
Surplus June 30, 1911,	\$106 02

GENERAL BALANCE SHEET.

Assets.

Property accounts,	\$800 00
Notes and accounts receivable,	55 00
Supplies on hand,	15 00
Cash on hand,	106 02
Other assets,	150 00
Total debits,	\$1,126 02

Liabilities.

Capital stock,	\$1,000 00
Balance, surplus,	126 02
Total credits,	\$1,126 02

STATISTICAL INFORMATION.

Number of subscribers,	48
Number of instruments,	51
Number of operators,	2
Number of pay stations,	1
Number of subscribers on party lines,	48
Overhead system:—	
Pole line, miles,	5
Iron wire, miles,	10

TELEGRAPH COMPANIES.

COMMERCIAL CABLE COMPANY.

Location of principal business office: 112 State Street, Boston, Mass.

Date of organization: March 14, 1906.

Date of incorporation: March 14, 1906.

State in which incorporated: Massachusetts.

Date of annual meeting: February 15.

Date when company began to give service: April 1, 1906.

Service is given by this company over its own lines in Boston and Rockport.

GENERAL OFFICERS AND OFFICIAL TITLES.

Clarence H. Mackay,	.	.	.	.	<i>President.</i>
George G. Ward,	.	.	.	.	<i>Vice-President.</i>
Edward C. Platt,	.	.	.	.	<i>Treasurer and Assistant Clerk</i>
Frederick H. Putt,	.	.	.	.	<i>Clerk.</i>

DIRECTORS AND RESIDENCES.

Clarence H. Mackay,	.	.	.	.	Roslyn, Long Island, N. Y.
George G. Ward,	.	.	.	.	New York, N. Y.
Frederick H. Putt,	.	.	.	.	Boston, Mass.

CAPITAL.

Capital authorized by charter,	.	.	.	.	.	.	\$10,000 00
Capital authorized by vote of company,	.	.	.	.	.	.	10,000 00
Capital paid in, 100 shares; par value, \$100,	.	.	.	.	.	.	10,000 00

Whole number of stockholders,	.	.	.	.	.	.	4
Number of stockholders resident in Massachusetts,	.	.	.	.	.	.	1
Amount of stock held in Massachusetts (shares),	.	.	.	.	.	.	1

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Revenue from operation,	.	\$38,596 48
General expense,	\$2,566 30	
Operating expense,	28,845 57	
Current repair,	2,039 06	
Rented lines,	4,800 00	
Total expenses,	<hr/>	38,250 93
Net revenue from operation,	.	\$345 55
Miscellaneous income:—		
Bank interest,	.	189 94
Surplus for year ending June 30, 1911,	.	<hr/> \$535 49

EARNINGS.			
	Items.		Totals.
Gross earnings from operation:—			
Cable service,			\$38,596 48
Miscellaneous income:—			
Bank interest,			189 94
Total gross earnings and income,			\$38,786 42

EXPENSES.			
General expense:—			
Postage, printing and stationery,	\$830 49		
Miscellaneous office expenses,	1,065 67		
Travelling,	108 75		
Insurance,	377 59		
Taxes,	183 80		
Total general expense,			\$2,566 30
Operating:—			
Superintendence,	\$4,800 00		
Wages of operators,	18,104 05		
Wages of messengers,	1,429 25		
Rent, light and heat,	4,334 17		
Advertising and canvassing,	75 85		
Incidental,	102 25		
Total operating expense,			28,845 57
Current repair:—			
Repairs, instruments and batteries,	\$1,840 92		
Incidental,	198 14		
Total current repairs,			2,039 06
Rented lines,			4,800 00
Total of all operating expenses,			\$38,250 93

GENERAL BALANCE SHEET.

Assets.

Real estate at Rockport,— office building and land,	\$4,200 75	
Electrical apparatus, equipment, office furniture, etc.,	6,000 00	
Total plant account,		\$10,200 75
Current assets:—		
Cash on hand,	\$3,402 61	
Notes and accounts receivable,	9,396 20	
Supplies on hand,	879 60	
Total current assets,		13,678 41
Total assets,		\$23,879 16
Balance, deficit,		9,310 20
Total debits,		\$33,189 36

Liabilities.

Capital stock, common,	\$10,000 00
Current liabilities:—	
Audited vouchers and accounts,	23,189 36
Total credits,	\$33,189 36

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,	\$9,845 69	
Operating expenses,	38,250 93	
Gross earnings from operation,		\$38,596 48
Bank interest,		189 94
Balance, deficit,		9,310 20
	<hr/>	<hr/>
	\$48,096 62	\$48,096 62

GENERAL REMARKS AND EXPLANATIONS.

NOTE. — "This company carries on an international telegraph and cable business only, and does not do any intrastate nor interstate business in the United States, its sole business being to send and receive cablegrams between the United States, Canada and Europe."

THE COMMERCIAL UNION TELEGRAPH COMPANY OF
MASSACHUSETTS.

Location of principal business office: 100 State Street, Boston, Mass.

Date of organization: Aug. 3, 1888.

Date of incorporation: Aug. 3, 1888.

State in which incorporated: Massachusetts.

Date of annual meeting: fourth Saturday in July.

Date when company began to give service: Aug. 3, 1888.

Service is given by this company over its own lines in the following cities and towns:—

Adams,	Lawrence,	North Adams,
Athol,	Lenox,	Orange,
Fitchburg,	Leominster,	Pittsfield,
Gardner,	Lowell,	Shelburne,
Greenfield,	Merrimac,	Williamstown.
Haverhill,	Newburyport,	

GENERAL OFFICERS AND OFFICIAL TITLES.

C. A. Richardson,	<i>President.</i>
Charles P. Bruch,	<i>Vice-President.</i>
Theodore L. Cuyler, Jr.,	<i>Treasurer.</i>
F. G. McGinnis,	<i>Clerk.</i>

DIRECTORS AND RESIDENCES.

Edward J. Nally,	New York, N. Y.
Charles P. Bruch,	New York, N. Y.
C. A. Richardson,	Boston, Mass.

CAPITAL.

Capital authorized by charter,	\$10,000 00
Capital authorized by vote of company,	10,000 00
Capital paid in, 100 shares; par value, \$100,	10,000 00
Whole number of stockholders,	4
Number of stockholders resident in Massachusetts,	1
Amount of stock held in Massachusetts (shares),	1

CONDENSED STATEMENT OF OPERATING FOR THE YEAR (WHOLE SYSTEM).

	Items.	Totals.
Gross earnings from operation, ¹		\$41,373 52
General expense,	\$4,791 60	
Operating expense,	25,315 08	
Current repair,	7,757 23	
Total expenses,	<u>37,863 91</u>	
Surplus for year ending June 30, 1911,		\$3,509 61

EARNINGS (WHOLE SYSTEM).

Gross earnings from operation,	\$41,373 52
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EXPENSES (WHOLE SYSTEM).

General expense:—	
Salaries of officers,	\$2,114 15
Postage, printing and stationery,	698 14
Miscellaneous office expenses,	841 27
Damages,	25 68
Rent of right of way,	942 02
Taxes,	170 34
Total general expense,	<u>\$4,791 60</u>
Operating:—	
Wages of operators and others,	\$17,845 12
Wages of messengers,	3,751 43
Rent, light and heat,	3,314 89
Advertising and canvassing,	40 50
Incidental,	363 14
Total operating expense,	<u>25,315 08</u>
Current repair:—	
Repairs, overhead lines,	\$7,702 40
Repairs, underground lines,	9 55
Repairs, instruments and batteries,	45 28
Total current repairs,	<u>7,757 23</u>
Total of all operating expenses,	<u>\$37,863 91</u>

GENERAL BALANCE SHEET.

<i>Assets.</i>	
Plant required for operation,	\$10,000 00
Current assets:—	
Notes and accounts receivable,	\$14,039 05
Supplies on hand,	221 52
Total current assets,	<u>14,260 57</u>
Balance, deficit,	1,797 33
Total debits,	<u>\$26,057 90</u>

¹ Gross earnings in Massachusetts, \$4,121.53.

<i>Liabilities.</i>	<i>Totals.</i>
Capital stock, common,	\$10,000 00
Current liabilities:—	
Accounts payable,	16,057 90
	<hr/>
Total credits,	\$26,057 90

PROFIT AND LOSS ACCOUNT.

	<i>Dr.</i>	<i>Cr.</i>
Balance from previous year,	\$5,306 94	
Operating expenses,	37,863 91	
Gross earnings from operation,		\$41,373 52
Balance, deficit,		1,797 33
	<hr/>	<hr/>
	\$43,170 85	\$43,170 85

MARTHAS VINEYARD TELEGRAPH COMPANY.

Location of principal business office: Woods Hole, Mass.

Date of organization: July 16, 1900.

Date of incorporation: July 20, 1900.

State in which incorporated: Massachusetts.

Date of annual meeting: January 16.

Date when company began to give service: Oct. 1, 1900.

Service is given by this company over its own lines in the following towns:—

Edgartown,	Gosnold,	Oak Bluffs,
Falmouth,	Nantucket,	Tisbury.

GENERAL OFFICERS AND OFFICIAL TITLES.

Henry G. Haddon,	<i>President and General Manager.</i>
Frank G. McGinnis,	<i>Clerk and Treasurer.</i>

DIRECTORS AND RESIDENCES.

Charles F. Ames,	Winchester, Mass.
Charles A. Richardson,	Dorchester, Mass.
Henry G. Haddon,	Woods Hole, Mass.

CAPITAL.

Capital authorized by charter,	\$10,000 00
Capital authorized by vote of company,	10,000 00
Capital paid in, 100 shares; par value, \$100,	10,000 00
Whole number of stockholders,	2
Number of stockholders resident in Massachusetts,	None.

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Gross earnings from operation,		\$12,270 56
Less rebates and discounts,		30 04
		<hr/>
Revenue from operation,		\$12,240 52
General expense,	\$2,677 12	
Operating expense,	3,336 51	
Current repair,	1,603 71	
Total expenses,	<hr/>	7,617 34
		<hr/>
Net revenue from operation,		\$4,623 18
Miscellaneous income,		97 11
		<hr/>
Total income above expenses,		\$4,720 29
Dividends declared on stock, 5%,		500 00
		<hr/>
Surplus for year ending June 30, 1911,		\$4,220 29

EARNINGS.

Gross earnings from operation: —		
Telegraph service,	\$12,027 64	
Money transfers,	67 63	
Messenger service,	70 80	
Leased wires,	104 49	
	<hr/>	\$12,270 56
Less rebates and discounts,		30 04
		<hr/>
Total gross earnings from operation,		\$12,240 52
Miscellaneous income: —		
Interest on deposits,	\$52 11	
Subrents,	45 00	
Total miscellaneous income,	<hr/>	97 11
		<hr/>
Total gross earnings and income,		\$12,337 63

EXPENSES.

General expense: —		
Salaries of officers,	\$1,500 00	
Postage, printing and stationery,	293 08	
Miscellaneous office expenses,	30 84	
Travelling,	190 85	
Legal,	25 00	
Rent of right of way,	415 95	
Insurance,	21 25	
Taxes,	200 15	
Total general expense,	<hr/>	\$2,677 12
Operating: —		
Wages of operators,	\$3,527 27	
Wages of messengers,	300 70	
		<hr/>
Amounts carried forward,	\$3,827 97	\$2,677 12

	Items.	Totals.
<i>Amounts brought forward,</i>	\$3,827 97	\$2,677 12
Operating — <i>Concluded.</i>		
Telephone charges,	154 53	
Rent, light and heat,	484 66	
Incidental,	288 80	
	<hr/>	
	\$4,755 96	
Less proportion of expense for handling Western Union and Postal Telegraph Company's business,	1,419 45	
Total operating expense,	<hr/>	3,336 51
Current repair: —		
Repairs, overhead lines,	\$1,192 71	
Repairs, submarine lines,	177 80	
Repairs, instruments and batteries,	222 14	
Incidental,	11 06	
Total current repairs,	<hr/>	1,603 71
		<hr/>
Total of all operating expenses,		\$7,617 34

GENERAL BALANCE SHEET.

<i>Assets.</i>		
Overhead lines,	\$4,000 00	
Submarine lines,	5,000 00	
Equipment,	668 50	
Office furniture and fixtures,	331 50	
Total plant account,	<hr/>	\$10,000 00
Current assets: —		
Cash on hand,	\$4,234 09	
Notes and accounts receivable,	2,283 81	
Total current assets,	<hr/>	6,517 90
		<hr/>
Total debits,		\$16,517 90
<i>Liabilities.</i>		
Capital stock, common,		\$10,000 00
Balance, surplus,		6,517 90
		<hr/>
Total credits,		\$16,517 90

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,		\$2,297 61
Gross earnings from operation,		12,270 56
Miscellaneous income,		97 11
Operating expenses,	\$7,617 34	
Rebates and discounts,	30 04	
Dividends declared on stock,	500 00	
Balance, surplus,	6,517 90	
	<hr/>	
	\$14,665 28	\$14,665 28

NEW ENGLAND TELEGRAPH COMPANY OF MASSACHUSETTS.

Location of principal business office: 84 State Street, Boston, Mass.

Date of organization: April 7, 1884.

Date of incorporation: April 7, 1884.

State in which incorporated: Massachusetts.

Date of annual meeting: second Tuesday in August.

Service is given by this company over its own lines in Attleborough, Brockton, Gloucester, Rockport and Salem.

GENERAL OFFICERS AND OFFICIAL TITLES.

Charles C. Adams,	.	.	.	.	.	.	<i>President.</i>
Charles P. Bruch,	.	.	.	.	.	.	<i>Vice-President.</i>
Theodore L. Cuyler, Jr.,	.	.	.	.	.	.	<i>Treasurer.</i>
J. H. Wentworth,	.	.	.	.	.	.	<i>Clerk and Transfer Agent.</i>

DIRECTORS AND RESIDENCES.

Charles C. Adams,	.	.	.	.	.	New York, N. Y.
Charles P. Bruch,	.	.	.	.	.	New York, N. Y.
C. A. Richardson,	.	.	.	.	.	Boston, Mass.

CAPITAL.

Capital authorized by charter,	.	.	.	.	.	.	\$30,000 00
Capital authorized by vote of company,	.	.	.	.	.	.	30,000 00
Capital paid in, 300 shares; par value, \$100,	.	.	.	.	.	.	30,000 00
Whole number of stockholders,	.	.	.	.	.	.	4
Number of stockholders resident in Massachusetts,	.	.	.	.	.	.	None.

CONDENSED STATEMENT OF OPERATING FOR THE YEAR (WHOLE SYSTEM).

	Items.	Totals.
Revenue from operation,	.	\$18,742 60
General expense,	\$2,247 66	
Operating expense,	8,084 38	
Current repair,	2,298 92	
Total expenses,		12,630 96
Surplus for year ending June 30, 1911,		\$6,111 64

EARNINGS (WHOLE SYSTEM).

Gross earnings from operation, ¹	\$18,742 60
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EXPENSES (WHOLE SYSTEM).

General expense: —	
Salaries of officers,	\$1,238 54
Postage, printing and stationery,	237 71
Miscellaneous office expenses,	299 39
Damages,	26 72
Amount carried forward,	\$1,802 36

¹ Gross earnings in Massachusetts, \$931.44.

	Items.	Totals.
<i>Amount brought forward,</i>	\$1,802 36	
General expense — <i>Concluded.</i>		
Rent of right of way,	104 81	
Taxes,	340 49	
Total general expense,		\$2,247 66
Operating:—		
Wages of operators and others,	\$7,197 52	
Wages of messengers,	352 08	
Rent, light and heat,	500 09	
Incidental,	34 69	
Total operating expense,		8,084 38
Current repair:—		
Repairs overhead lines,		2,298 92
Total of all operating expenses,		\$12,630 96

GENERAL BALANCE SHEET.

<i>Assets.</i>		
Plant required for operation,		\$30,000 00
Current assets:—		
Notes and accounts receivable,	\$5,936 90	
Supplies on hand,	2 59	
Total current assets,		5,939 49
Total debits,		\$35,939 49
<i>Liabilities.</i>		
Capital stock, common,		\$30,000 00
Current liabilities:—		
Accounts payable,		1,105 87
Balance, surplus,		4,833 62
Total credits,		\$35,939 49

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,	\$1,278 02	
Operating expenses,	12,630 96	
Gross earnings from operation,		\$18,742 60
Balance, surplus,	4,833 62	
	\$18,742 60	\$18,742 60

POSTAL TELEGRAPH-CABLE COMPANY OF MASSACHUSETTS.

Location of principal business office: 100 State Street, Boston, Mass.

Date of organization: April 3, 1896.

Date of incorporation: April 3, 1896.

State in which incorporated: Massachusetts.

Date of annual meeting: fourth Saturday in July.

Date when company began to give service: April 3, 1896.

Service is given by this company over its own lines in the following cities and towns:—

Amherst,	Fall River,	New Bedford,
Attleborough,	Falmouth,	Northampton,
Boston,	Foxborough,	Springfield,
Brookline,	Framingham,	Sturbridge,
Cambridge,	Holyoke,	Taunton,
Charlton,	Lynn,	Westfield,
Chelsea,	Malden,	Woburn,
Chicopee,	Manchester,	Worcester.
Danvers,	Natick,	

GENERAL OFFICERS AND OFFICIAL TITLES.

C. A. Richardson,	.	.	.	.	.	<i>President.</i>
Edward B. Pillsbury,	.	.	.	.	.	<i>Vice-President.</i>
Theodore L. Cuyler, Jr.,	.	.	.	.	.	<i>Treasurer.</i>
F. G. McGinnis,	.	.	.	.	.	<i>Clerk and Transfer Agent.</i>

DIRECTORS AND RESIDENCES.

Edward J. Nally,	.	.	.	.	.	New York, N. Y.
Charles P. Bruch,	.	.	.	.	.	New York, N. Y.
C. A. Richardson,	.	.	.	.	.	Boston, Mass.

CAPITAL.

Capital authorized by charter,	.	.	.	.	.	\$5,000 00
Capital authorized by vote of company,	.	.	.	.	.	5,000 00
Capital paid in, 50 shares; par value, \$100,	.	.	.	.	.	5,000 00
Whole number of stockholders,	.	.	.	.	.	1
Number of stockholders resident in Massachusetts,	.	.	.	.	.	None.

CONDENSED STATEMENT OF OPERATING FOR THE YEAR (WHOLE SYSTEM).

	Items.	Totals.
Revenue from operation, ¹	.	\$334,518 78
General expense,	\$26,398 49	
Operating expense,	294,535 17	
Current repair,	38,297 62	
Total expenses,		359,231 28
Deficit for year ending June 30, 1911,		\$24,712 50

EARNINGS (WHOLE SYSTEM).

Gross earnings from operation,	\$334,518 78
--------------------------------	---	---	---	---	---	--------------

EXPENSES (WHOLE SYSTEM).

General expense:—		
Salaries of officers,	\$3,827 69	
Postage, printing and stationery,	6,329 54	
Miscellaneous office expenses,	11,100 37	
Amount carried forward,	\$21,257 60	

¹ Gross earnings in Massachusetts, \$28,039.24.

	Items.	Totals.
<i>Amount brought forward,</i>	\$21,257 60	
General expense — <i>Concluded,</i>		
Damages,	1,141 79	
Legal,	1,383 93	
Rent of right of way,	1,007 30	
Taxes,	1,607 87	
Total general expense,		\$26,398 49
Operating: —		
Wages of operators and others,	\$186,811 08	
Wages of messengers,	61,599 03	
Rent, light and heat,	43,654 85	
Advertising and canvassing,	135 57	
Incidental,	2,334 64	
Total operating expenses,		294,535 17
Current repair: —		
Repairs overhead lines,	\$35,436 13	
Repairs underground lines,	580 01	
Repairs call circuits,	1,338 68	
Repairs instruments and batteries,	942 80	
Total current repairs,		38,297 62
 Total of all operating expenses,		 \$359,231 28

GENERAL BALANCE SHEET.

<i>Assets.</i>		
Plant required for operation,		\$5,000 00
Current assets: —		
Cash on hand,	\$1,277 04	
Notes and accounts receivable,	38,215 54	
Supplies on hand,	541 75	
Total current assets,		40,034 33
Balance, deficit,		35,020 96
 Total debits,		 \$80,055 29
<i>Liabilities.</i>		
Capital stock, common,		\$5,000 00
Current liabilities: —		
Accounts payable,		75,055 29
 Total credits,		 \$80,055 29

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,	\$10,308 46	
Operating expenses,	359,231 28	
Gross earnings from operation,		\$334,518 78
Balance, deficit,		35,020 96
	<hr/>	<hr/>
	\$369,539 74	\$369,539 74

TELEPOST COMPANY OF MASSACHUSETTS.

Location of principal business office: 32 Causeway Street, Boston, Mass.

Date of organization: Feb. 10, 1909.

Date of incorporation: Feb. 10, 1909.

State in which incorporated: Massachusetts.

Date of annual meeting: second Tuesday in February.

Date when company began to give service: July 1, 1909.

Service is given by this company over its own lines in Boston.

GENERAL OFFICERS AND OFFICIAL TITLES.

Harvey Lee Sellers,	<i>President.</i>
Robert Henry Sellers,	<i>Secretary and Treasurer.</i>
Louis Solomon,	<i>Clerk.</i>

DIRECTORS AND RESIDENCES.

Harvey Lee Sellers,	Montclair, N. J.
Robert Henry Sellers,	Montclair, N. J.
Thomas Conyngton,	Upper Montclair, N. J.

CAPITAL.

Capital authorized by charter,	\$10,000 00
Capital authorized by vote of company,	10,000 00
Capital paid in, 100 shares; par value, \$100,	10,000 00

Whole number of stockholders,	3
Number of stockholders resident in Massachusetts,	None.
Amount of stock held by parent telephone company (shares),	98

DEBTS.

Bonds or notes issued, viz.:—

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
Feb. 14, 1911	Feb. 14, 1921	- - -	-	\$10,000 00
Total amount of bonds and notes,				\$10,000 00
Capital paid in,				10,000 00
Total liability for capital and loans,				\$20,000 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Revenue from operation,		\$1,598 88
General expense,	\$366 85	
Operating expense,	1,638 55	
Current repair,	244 14	
Total expenses,		2,249 54
Deficit for year ending June 30, 1911,		\$650 66

EARNINGS.

EARNINGS.									
								Items.	Totals.
Gross earnings: —									
Telegraph service,									\$1,190 55
Press service,									408 33
Total gross earnings from operation,									\$1,598 88

EXPENSES.

General expense:—		
Postage, printing and stationery,	\$13	14
Miscellaneous office expenses,	105	73
Travelling,		82
Taxes,	247	16
Total general expense,		\$366 85
Operating:—		
Superintendence,	\$111	11
Wages of operators,	795	88
Wages of others,	108	37
Wages of messengers,	262	81
Rent, light and heat,	304	50
Incidental,	55	88
Total operating expense,		1,638 55
Current repairs,		244 14
Total of all operating expenses,		\$2,249 54

GENERAL BALANCE SHEET.

Assets.

Overhead lines,	\$100 00	
Underground lines,	4,939 49	
Equipment,	250 00	
Office furniture and fixtures,	360 10	
Total plant account,	<u>5,649 59</u>	\$5,649 59
Contracts and licenses,		10,000 00
Current assets: —		
Cash on hand,	\$35 90	
Notes and accounts receivable,	2,238 98	
Supplies on hand,	36 00	
Total current assets,	<u>2,310 88</u>	2,310 88

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Liabilities.

Capital stock, common,	\$10,000 00
Current liabilities:—	
Loans and notes payable,	10,000 00
Total credits,	\$20,000 00

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,	\$1,388 87	
Operating expenses,	2,249 54	
Gross earnings from operation,		\$1,598 88
Balance, deficit,		2,039 53
	<hr/>	<hr/>
	\$3,638 41	\$3,638 41

PROPERTY ACCOUNTS (ADDITIONS AND DEDUCTIONS DURING THE YEAR).

<i>Additions.</i>	<i>Items.</i>	<i>Totals.</i>
Underground lines,	\$1,728 89	
Equipment,	250 00	
Office furniture and fixtures,	84 25	
Total additions,	<hr/>	\$2,063 14

UNITED TELEGRAM COMPANY.

Location of principal business office: 26 Congress Square, Boston, Mass.

Date of organization: June, 1890.

Date of incorporation: June 16, 1890.

State in which incorporated: New Jersey.

Date of annual meeting: first Wednesday in November.

Date when company began to give service: June, 1890.

Service is given by this company over its own lines in the city of Boston.

GENERAL OFFICERS AND OFFICIAL TITLES.

Charles F. Parker,	<i>President.</i>
Walter L. Sanborn,	<i>Vice-President.</i>
L. Wallace Sweetser,	<i>Treasurer.</i>
G. L. Ellwood,	<i>Assistant Treasurer.</i>

DIRECTORS AND RESIDENCES.

Charles F. Parker,	Boston, Mass.
Walter L. Sanborn,	Newton, Mass.
L. W. Sweetser,	Wakefield, Mass.
Carl C. Lane,	Quincy, Mass.
Walter E. Severance,	Dorchester, Mass.
Stewart F. Martin,	Jamaica Plain, Mass.
Lewis C. Harris,	Newark, N. J.

CAPITAL.

Capital authorized by charter,	\$500,000 00
Capital authorized by vote of company,	50,000 00
Capital paid in, 10,000 shares; par value, \$5,	50,000 00
Whole number of stockholders,	75
Number of stockholders resident in Massachusetts,	30
Amount of stock held in Massachusetts (shares),	6,969

DEBTS.

Bonds or notes issued, viz.:—

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
July 1, 1890	July 1, 1920	Income bonds,	5	\$200,000 00
Total amount of bonds and notes,				\$200,000 00
Capital paid in,				50,000 00
Total liability for capital and loans,				\$250,000 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR.

	Items.	Totals.
Revenue from operation,		\$42,924 43
General expense,	\$11,805 31	
Operating expense,	9,916 62	
Current repair,	3,300 00	
Rented lines,	15,916 64	
Total expenses,		40,938 57
Net revenue from operation,		\$1,985 86
Miscellaneous income,		1,345 44
Surplus for year ending June 30, 1911,		\$3,331 30

EARNINGS.

Gross earnings from operation:—	
Stocks and markets,	\$42,924 43
Miscellaneous income:—	
Interest on deposits,	1,345 44
Total gross earnings and income,	\$44,269 87

EXPENSES.

General expense:—	
Salaries of officers,	\$5,000 04
Wages of clerks,	3,265 00
Postage, printing and stationery,	905 53
Storeroom expenses,	27 00
Legal,	152 00
Rent of land and buildings,	1,750 04
Insurance,	60 00
Taxes,	215 80
General expense,	429 90
Total general expense,	\$11,805 31
Amount carried forward,	\$11,805 31

	Items.	Totals.
<i>Amount brought forward,</i>		\$11,805 31
Operating:—		
Superintendence,	\$1,900 00	
Wages of operators,	5,504 79	
Wages of others,	1,707 31	
Telephone charges,	84 03	
Light and power,	361 72	
Incidental,	358 77	
Total operating expense,		9,916 62
Current repair:—		
Repairs overhead lines,	\$480 00	
Repairs underground lines,	480 00	
Repairs instruments and batteries,	2,340 00	
Total current repairs,		3,300 00
Rented lines,		15,916 64
Total of all operating expenses,		\$40,938 57

GENERAL BALANCE SHEET.

<i>Assets.</i>		
Equipment,	\$9,195 00	
Tickers,	19,897 25	
Franchise,	80,000 00	
Ticker rights,	104,642 02	
Total plant account,		\$213,734 27
Current assets:—		
Cash on hand,		3,727 03
Sinking and other special funds:—		
Funds in escrow,		35,000 00
Total debits,		\$252,461 30
<i>Liabilities.</i>		
Capital stock, common,		\$50,000 00
Bonded debt,		200,000 00
Current liabilities:—		
Dividends not called for,		537 50
Total liabilities,		\$250,537 50
Balance, surplus,		1,923 80
Total credits,		\$252,461 30

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,		\$2,372 39
Gross earnings from operation,		42,924 43
Miscellaneous income,		1,345 44
Operating expenses,	\$40,938 57	
For depreciation:—		
Ticker rights,	3,779 89	
Balance, surplus,	1,923 80	
	\$46,642 26	\$46,642 26

PROPERTY ACCOUNTS (DEDUCTIONS DURING THE YEAR).

Ticker rights,	\$3,779 89
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THE WESTERN UNION TELEGRAPH COMPANY.

Location of principal business office: 195 Broadway, New York, N. Y.

Date of organization: April 1, 1851.

Date of incorporation: April 1, 1851.

State in which incorporated: New York.

Date of annual meeting: second Wednesday in October.

Date when company began to give service: April, 1851.

GENERAL OFFICERS AND OFFICIAL TITLES.

Theodore N. Vail,	<i>President.</i>
Newcomb Carlton,	<i>Vice-President.</i>
J. B. Van Every,	<i>Vice-President.</i>
Thomas F. Clark,	<i>Vice-President.</i>
G. W. E. Atkins,	<i>Vice-President.</i>
Belvidere Brooks,	<i>General Manager.</i>
A. R. Brewer,	<i>Treasurer.</i>
E. Y. Gallaher,	<i>Auditor.</i>
Rush Taggart,	<i>General Counsel.</i>
George H. Fearons,	<i>General Attörney.</i>
John F. Dillon,	<i>Consulting Counsel.</i>
Francis N. Whitney,	<i>Tax Attorney.</i>
T. W. Carroll,	<i>Assistant to General Manager.</i>
F. W. Lienau,	<i>Assistant Secretary.</i>
Lewis Dresdner,	<i>Assistant Treasurer.</i>
H. W. Ladd,	<i>Assistant Auditor.</i>
G. M. Yorke,	<i>Engineer.</i>
W. E. Athearn,	<i>Engineer of Equipment.</i>
Robert E. Chetwood,	<i>Engineer of Construction.</i>
W. N. Fashbaugh,	<i>Traffic Engineer.</i>
Wm. Holmes,	<i>Superintendent, Tariff Bureau.</i>
H. E. Roberts,	<i>General Purchasing Agent.</i>
Wm. G. Higgins,	<i>Superintendent, Supplies.</i>
S. M. Williams,	<i>Manager, C. N. D.</i>
W. J. Dealy,	<i>General Superintendent, C. N. D.</i>
E. G. Carley,	<i>General Transfer Agent.</i>
A. G. Saylor,	<i>General Superintendent, Eastern Division, New York, N. Y.</i>
C. F. Ames,	<i>District Superintendent, Boston, Mass.</i>

DIRECTORS.

Oliver Ames,
John Jacob Astor,
Union N. Bethell,
Henry A. Bishop,
Robert C. Clowry,
Henry P. Davison,
Chauncey M. Depew,
Harris C. Fahnestock,
Henry M. Flagler,
Robert M. Galloway,
Edwin Gould,
George J. Gould,
Edward J. Hall,
Henry S. Howe,
Thomas H. Hubbard,

Edward T. Jeffery,
Charles Lanier,
Robert S. Lovett,
John J. Mitchell,
William H. Moore,
J. Pierpont Morgan,
Jacob H. Schiff,
Joseph J. Slocum,
James Stillman,
Harry B. Thayer,
Theo. N. Vail,
Henry Walters,
John I. Waterbury,
Robert Winsor.

CAPITAL.

Capital authorized by charter,	\$100,000,000 00
Capital authorized by vote of company,	100,000,000 00
Capital paid in, 998,171 shares; par value, \$100,	99,817,100 00

Whole number of stockholders, 12,461

DEBTS.

Bonds or notes issued, viz.:—

DATE.	When due.	How secured.	Rate of Interest (Per Cent.).	Amount.
Sundry dates since 1900	May 1, 1950	Funding and real estate mortgage bonds.	4½	\$20,000,000 00
Sundry dates since 1888	Jan. 1, 1938	Collateral trust bonds (issued \$8,725,000; in company's treasury, \$18,000).	5	8,707,000 00
Sundry dates since 1906	Nov. 1, 1936	Convertible redeemable bonds (issued, \$10,000,000; in company's treasury, \$2,000,000).	4	8,000,000 00
Total amount of bonds and notes,				\$36,707,000 00
Capital paid in,				99,817,100 00
Total liability for capital and loans,				\$136,524,100 00

CONDENSED STATEMENT OF OPERATING FOR THE YEAR (WHOLE SYSTEM).

	Items.	Totals.
Gross earnings from operation, ¹	\$35,478,792 88	
Paid other lines, refunded and uncollected,	919,793 92	
Revenue from operation,		\$34,558,998 96
General expense,	\$13,554,962 19	
Operating expense,	8,929 070 81	
Current repair,	3,051,695 06	
Reconstruction,	1,602,924 88	
Deferred maintenance,	135,000 00	
Royalties and rented lines,	1,686,585 80	
Total expenses,		28,960,238 74
Net revenue from operation,		\$5,598,760 22
Miscellaneous income,		1,680,196 23
Total income above expense,		\$7,278,956 45
Amount carried forward,		\$7,278,956 45

¹ Gross earnings in Massachusetts, \$84,004.07.

	Items.	Totals.
<i>Amount brought forward,</i>		\$7,278,956 45
Fixed charges:—		
Interest on funded debt,	\$1,733,389 52	
Interest on floating debt,	173,598 97	
Total fixed charges,		1,906,988 49
Surplus of net income above fixed charges,		\$5,371,967 96
Dividends paid,		2,991,304 50
Surplus for year ending June 30, 1911,		\$2,380,663 46

EARNINGS (WHOLE SYSTEM).

Gross earnings from operation:—		
Telegraph and cable service,	\$28,214,334 17	
Other lines, refunded and uncollected,	919,793 92	
Stocks and markets,	1,519,767 92	
Money transfers,	467,709 10	
Messenger service,	156,371 52	
Leased wires,	2,160,980 26	
Press messages,	1,743,562 28	
Time service,	249,672 52	
Election returns and miscellaneous,	46,601 19	
		\$35,478,792 88
Other lines, refunded and uncollected,		919,793 92
Total gross earnings from operation,		\$34,558,998 96
Miscellaneous income,		1,680,196 23
Total gross earnings and income,		\$36,239,195 19

EXPENSES (WHOLE SYSTEM).

General expense:—		
Salaries of officers and wages of clerks,	\$13,554,962 19	
Printing and stationery,	504,791 03	
Miscellaneous expenses and taxes,	2,057,607 34	
Travelling and tax expenses,	42,654 29	
Damages,	176,366 20	
Legal,	157,922 44	
Paid railroad companies,	1,135,071 96	
Rent of buildings and offices,	1,133,552 22	
Depreciation ocean cables,	135,000 00	
Total general expense,		\$18,897,927 67
Operating:—		
Superintendence,	\$410,367 56	
Wages of messengers, etc.,	2,433,943 02	
Telephone charges and commissions,	31,103 47	
Light and heat,	245,205 03	
Obtaining stock and commercial news reports,	217,652 83	
Total operating expense,		3,338,271 91
<i>Amount carried forward,</i>		\$22,236,199 58

	Items.	Totals.
<i>Amount brought forward,</i>		\$22,236,199 58
Current repair:—		
Repairs overhead, underground and submarine lines,	\$2,266,997 93	
Repairs instruments and batteries,	784,697 13	
Office repairs and furniture,	374,438 99	
Total current repairs,		3,426,134 05
Royalties and rented lines,		1,686,585 80
Total expenses, not including charges for reconstruction and deferred maintenance,		\$27,348,919 43
Reconstruction items charged to expense:—		
Repairs overhead and underground lines,		1,602,924 88
Deferred maintenance items charged to expense:—		
Extinguishment of patents,		8,394 43
Total of all operating expenses,		\$28,960,238 74

GENERAL BALANCE SHEET.

Assets.

Property account:—

Telegraph lines and equipment, including properties controlled by stock ownership or held under perpetual leases and merged in the Western Union System,	\$131,503,226 07	
Real estate,	5,913,875 67	
Patents,	106,957 30	
Amount recoverable on the expiration of long term lease in respect of obligations assumed thereunder,	1,180,000 00	
		\$138,704,059 04

Other securities owned:—

Stock of telegraph, cable and other allied companies operated under term leases (not including securities held as lessee, amounting to a par value of \$2,236,642),	\$6,263,453 19	
Stock of telegraph, cable and other allied companies not leased,	4,878,583 08	
Sinking fund (cash and securities),	33,889 43	
Miscellaneous investments,	356,728 26	
Purchase money, notes and obligations,	16,500,000 00	
		28,032,653 96
Inventories of materials and supplies,		2,431,644 13

Current assets:—

Bills and accounts receivable, including managers' and superintendents' balances, etc. (less reserve for doubtful accounts),	\$5,092,297 71	
Treasurer's balances, including cash at banks at New York and outside depositories and in transit,	1,599,488 57	
		6,691,786 28
Total,		\$175,860,143 41

<i>Liabilities.</i>	<i>Items.</i>	<i>Totals.</i>
Capital stock issued,	\$99,817,100 00	
Less held in treasury,	30,131 51	
	<hr/>	\$99,786,968 49
Capital stock of subsidiary companies not owned by the Western Union Telegraph Company (par value):—		
Companies controlled by perpetual leases,	\$3,435,475 00	
Companies controlled by stock ownership,	458,000 00	
	<hr/>	3,893,475 00
Funded debt:—		
Bonds of the Western Union Telegraph Company 4½ per cent. funding and real estate mortgage fifty-year gold bonds, 1950,	\$20,000,000 00	
Convertible 4 per cent. redeemable gold bonds, 1936,	\$10,000,000 00	
Less held in treasury,	2,000,000 00	
	<hr/>	8,000,000 00
Collateral 5 per cent. trust bonds, 1936,	\$8,725,000 00	
Less held in treasury,	18,000 00	
	<hr/>	8,707,000 00
Bonds of subsidiary companies assumed or guaranteed by the Western Union Telegraph Company,	\$7,000,000 00	
Less held in treasury,	3,123,000 00	
	<hr/>	3,877,000 00
	<hr/>	40,584,000 00
Total capital liabilities,		\$144,264,443 49
Temporary loan partly secured by deposit of treasury bonds,		\$3,500,000 00
Current liabilities:—		
Accounts payable,	\$1,985,023 25	
Accrued taxes,	787,341 59	
Interest and guaranteed dividends accrued on bonds and stocks,	323,585 77	
Unpaid dividends (including dividend of \$747,-886.50 payable July 15, 1911),	779,543 98	
	<hr/>	3,875,494 59
Deferred non-interest bearing liabilities, in respect of proceeds of sales of securities and other properties held under leases, for terms expiring in 1981 from lessee companies in which the Western Union Telegraph Company has a controlling interest, payable only on the determination of the leases,		12,382,901 30
Reserves:—		
For maintenance of cables,	\$1,333,220 94	
For contingencies,	389,727 11	
	<hr/>	1,722,948 05
Surplus:—		
Balance stated on annual report of June 30, 1910,	\$7,733,692 52	
Add balance from income account,	2,380,663 46	
	<hr/>	10,114,355 98
Total,		\$175,860,143 41

PROFIT AND LOSS ACCOUNT.

	Dr.	Cr.
Balance from previous year,		\$7,733,692 52
Gross earnings from operation,		35,478,792 88
Miscellaneous income, real estate revenue and income from securities,		1,680,196 23
Operating expenses, including charges on account of reconstruction and deferred maintenance,	\$28,960,238 74	
Rebates and discounts,	919,793 92	
Interest on funded debt,	1,733,389 52	
Interest on floating debt,	173,598 97	
Dividends declared on stock,	2,991,304 50	
Balance, surplus,	10,114,355 98	
	<hr/>	<hr/>
	\$44,892,681 63	\$44,892,681 63

NOTE.—“There are over one thousand offices in the State of Massachusetts.”

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